

California State Journal of Medicine.

OWNED AND PUBLISHED MONTHLY BY THE

Medical Society of the State of California

PHILIP MILLS JONES, M. D., Secretary and Editor

PUBLICATION COMMITTEE

GEORGE H. EVANS, M. D.

A. B. GROSSE, M. D.

C. D. McGETTIGAN, M. D.

HARRY M. SHERMAN, M. D.

ADDRESS ALL COMMUNICATIONS

Secretary State Society, - - } Office Room 1, Y. M. C. A. Bldg.,
State Journal, - - - } San Francisco.
Official Register, - - - }

Telephone, Main 1560.

IMPORTANT NOTICE!

All Scientific Papers submitted for Publication must be Typewritten. Notify the office promptly of any change of address, in order that mailing list and addresses in the Register may be corrected.

APRIL, 1905.

NOTICE!

To Riverside, one and one-third fare for the round trip. Be sure and get a receipt certificate when you buy your going ticket. Receipt certificates will be issued with going tickets 15 days before the date of the meeting. Meeting at The New Glenwood Hotel, Riverside, April 18th to 20th.

EDITORIAL NOTES.

With the deepest and most profound reverence, one may well say, Thank God! The Legislature has adjourned *sine die*! Fortunately, **THANK GOD!** no harm has been done so far as the relations of the physician to the public are concerned, and the standards required for eligibility to practice medicine within the state remain unchanged. The more than dangerous antivaccination bill, which was passed by both houses, was vetoed by the Governor, of course. Assembly Bill No. 267, which amended the present medical law practically out of existence, came to a vote after third reading on March 7th, and was defeated by 43 to 14, from which it would appear that the measure really had few friends in the house. Assembly Bill No. 1164, which amended the same law in the section defining the practice of medicine in such a way as to permit any pharmacist to practice medicine or surgery, was, on the same day, refused passage by a vote of 13 to 34. The two bills representing the very acme of superlative legislative assinnity, the bills creating a board of examiners of "naturopathy" (?), died on the file; had they come to a vote they would have been snowed under even deeper than No. 267. It has been rumored that several of these and similar "foolish bills," were introduced with the hope of passing them up to

the Governor, knowing that he would have to veto them and thus make a few enemies who would oppose a second term. Whether this rumor is anything more than idle words, we do not know; but he has been spared the necessity. For all of these things let us be thankful, and for that we do not have to be watchful for another two years, let us unite in saying, Thank God! The Legislature has adjourned! (But what an ironical commentary on the venality of the men we elect to frame our laws!)

As probably every member of the Society knows, the next meeting of the American Medical Association will be held in **THE A. M. A. MEETING.** Portland, July 11th to 14th. We understand that a large number of California physicians are planning to attend this meeting, and to them we would suggest that they do not delay in the matter of securing accommodations. Address Dr. Kenneth A. J. McKenzie, Portland, Oregon.

Many members of the A. M. A. in the East will attend and to them we would suggest that they do not return without coming South and visiting their friends in California—the garden spot of the United States. The hospitality of the Californian has long since passed into a proverb and we feel that it is almost superfluous to lay stress upon the fact that we will be more than glad to welcome the whole association, collectively and individually, and show them as much of our glorious State as they have time to see. Nowhere will they find such a magnificent chain of all-the-year-round resorts as are to be met with here, from Shasta in the north to Coronado in the south. Gentlemen, when you leave Portland for your homeward journey, come southward and visit us; you will be more than well repaid for your trip.

The President of the American Academy of Medicine, Dr. John B. Roberts, made a masterly presentation of certain very pertinent things connected with "**THE EXAMINERS.** Doctor's Duty to the State," in his address at the last meeting. In this issue the JOURNAL takes the liberty of quoting some paragraphs from this address, and begs to emphasize the fact that Dr. Roberts' opinion is well worth very careful and serious consideration. Doubtless there never was and never will be a state board of medical examiners that will not receive criticism, due either to its rigid enforcement of the laws under which it operates or to the character and scope of the examinations. In the very nature of things, no police measure can ever be rightly administered without interfering with some individuals, who will clamorously object and no doubt enlist the cooperation of those whose sympathies may be easily roused. There are always many persons whose sympathy can be readily worked upon. Witness the fact that no

matter how dastardly the crime may have been, individuals can always be found who will sign a petition praying for the pardon of the murderer. Clear-thinking, public spirited citizens who are not of a romantic turn of mind, ask only that proper police laws be enforced; and, in the main, they are enforced. Our own board of examiners is in no different case than the boards of other states where the laws have been conscientiously carried out. Mistakes undoubtedly have been and will be made so long as merely fallible men are available for examiners; even supreme courts have been known to reverse their own decisions, thus indicating previous error. Nearly four years have shown us, however, that California has a pretty good law and that its rigid application has worked beneficially upon the medical life of the state. Let us bear these facts well in mind and see to it that only men of the greatest probity are elected to our examining board; only men who cannot in any way be influenced to depart in the slightest degree from the wise provisions of an excellent law. Time will sufficiently demonstrate the wisdom of there being no "special cases;" of the un-wisdom of allowing sympathy to bias good, calm judgment.

Dr. C. A. L. Reed, of Cincinnati, has recently returned from his trip of inspection to the "Canal Zone" and has submitted his report, which appears in full in the *Journal of the A. M. A.*, March 11th, 1905. His findings are about what might have been expected with official incompetence and egotism at the top, holding down unquestioned ability and preventing the introduction of reform measures of paramount importance. A man by the name of Grunsky, not entirely unknown to Californians (!), was appointed or in some way became, a committee on sanitation. Mr. Grunsky is a very small man, speaking cerebrally, and the amount of authority he seems to have arrogated to himself and the amount of superfluous red tape with which he has enwrapped everything pertaining to his official position, so hampered the medical staff under the charge of no less a man than Col. Gorgas, that it was four or five months before the medical department could do anything to check the spread of yellow fever. Those conversant with conditions on the Isthmus of Panama know full well that the building of the canal, stupendous engineering problem though it is, does not depend so much upon the engineers who have charge of the construction, as upon the success with which the unsanitary conditions are remedied. It was not so much the Chagris River that defeated the French company in its efforts, as it was the little mosquito, carrying yellow fever and estivoautumnal malaria from victim to victim. In Cuba, Col. Gorgas has shown what he can do to put to rout these pests, if he is given a free hand. To trammel and tie down such a man when the issue is one of thousands of lives and

millions on millions of dollars—not to speak of the reputation of a country and its president, is worse than criminal—it is foolish. But what better could have been expected from a hydra-headed Canal Commission, each member so pride-swollen that his own importance sinks mere details of sanitation into insignificance? By all means, Mr. Roosevelt, do away with your foolish "commission," and let the men who have the brains and the ability dig the ditch.

On page 105, will be found a general outline of the program for the next meeting of the Society, at the New Glenwood Hotel, Riverside, Tuesday, Wednesday and Thursday, April 18th to 20th. On Monday, the 17th,

MEETING AT RIVERSIDE.

there will be held, at the same place, a meeting of the California Public Health Association, composed of all health officers of the state, and a very good program has been arranged. At the time of writing we have not received a copy of the program, but if it reaches us in time it will be printed elsewhere in the *JOURNAL*. The Committee of Arrangements of the Riverside County Medical Society has done excellent work and no effort will be spared to make this visit of our Society to that beautiful section of the state, a most enjoyable and memorable one. "The wives of the Riverside physicians have arranged to entertain the visiting ladies, at afternoon tea on Tuesday, in order that all may become acquainted, and all members are earnestly invited to bring their wives." The rooms of both the Rubidoux and the Victoria Clubs will be at the disposal of visiting physicians. From present indications there will be a large attendance and an unusually good meeting.

We, who follow the peaceful healing art, may be rather inclined to read from a distance the story which Lawson is telling of the inner workings of that association of piratical thieves dubbed the "Standard Oil System," and regard it only with passing interest; as of something remote from our life's sphere. Not so. During the Spanish war an army hospital was established at one of the camps in the South, and in it were many victims of official incompetence,—soldiers sick unto death from preventable diseases. The hospital was lighted only by means of oil lamps, and the weather was insufferably hot. Added to the distress and pain of unnecessary illness and the excessively warm weather, was the discomfort of hot, malodorous lamps at night. And this in spite of the fact that electric wires were run up to the very gates and that the whole place could have been readily and quickly wired, electric lights substituted for the stinking oil lamps, and one discomfort removed. Why was it not done? Because the "Standard Oil" influence in Washington was sufficient to prevent it; because the "System" wanted to sell more oil

LAWSON AND THE SYSTEM.

and make a few more dollars, heeding neither the comfort nor the lives of the American soldiers who lay sick unto death. Are the operations of the "System" so remote from our field of activity, after all? Are we always going to "stand for" any sort of imposition, corruption, injustice, exploitation? Will we never have courage to demand and strength to secure simple honesty as a substitute for graft?

Through the courtesy of the Board of Examiners we are able to present for your consideration a couple of examination papers (public records) handed in by graduates of a local medical school. The spelling is carefully reproduced, and bears evidence of the general illiteracy of the would-be physicians. Bacteriology and pathology are kindred branches and one should be reasonably justified in assuming that the degree of knowledge exhibited by an individual in one branch, would be a safe indication of his probable knowledge in the other. Candidate "A" received 93% in bacteriology and but 11+ % in pathology; candidate "B" received 86% in the former branch and 11% in the latter. The papers in bacteriology show a truly wonderful similarity in the matter and form of the answers, and even a casual examination of them reveals strong presumptive evidence of collusion between all the applicants from the school referred to, if not, indeed, of definite ante-examination knowledge of what the questions in bacteriology were to be. The examination in this subject was conducted by one of their own professors and the rumor was current at the time that the students themselves made up the examination questions. Comment seems rather superfluous.

The bill to establish a state sanatorium for the treatment of curable cases of tuberculosis, had a curious history. It was drawn in conference between the Tuberculosis Committee of our Society and a committee of the California Club, of San Francisco. A delegation of our committee went to Sacramento to see the Governor and also to have the bill introduced. The Governor objected to the proposed measure on the ground that the state could not afford to expend the money called for—\$150,000. The delegation was disheartened and returned to San Francisco where it attended a meeting of the directors of the Merchants' Association and discussed the matter. These gentlemen advised that the bill be introduced in spite of the Governor's objection, and that every effort be made to pass it; this for the reason that they recognized it to be not only a wise measure, but a very good and sound business proposition. It was, subsequently, introduced into both houses; in the senate by Ralston, where it became No. 706; in the assembly by Drew, No. 867. In both houses it was considered by two committees: "Public Health and Quarantine" and "Finance" and in each case

was reported with the recommendation that it "do not pass." Yet it passed the senate on March 4th without an opposing vote and the assembly on March 9th with but 6 opposing votes. Whether or not it will eventually be approved by the Governor and become a law, it is impossible to say at the time of writing, though there is some reason to hope that this will be the case. The special committee of the California Club, of which Mrs. Sydney Palmer is chairman, has worked very hard in the interests of this bill; its successful passage is largely due to her efforts.

[P. S. At the expiration of the time limit the Governor had not signed the Tuberculosis Sanatorium bill, and it is consequently dead. California could afford to spend \$365,625 for "tinkering" up the State Capitol, but did not have \$150,000 for a tuberculosis sanatorium.]

A very important question has been considered by the State Board of Medical Examiners during the past year. Considerable legal MEDICAL advice has been taken and there EXAMINERS. seems to be no reason to doubt the soundness of the decision reached.

It is in regard to the status of "Alternates," the question being as to whether or not alternates can serve as substitute examiners in the absence of the regularly elected members of the board. Without dissent, the legal opinions taken are to the effect that an alternate has no standing whatever, nor can he serve as a substitute for an examiner at an examination. In the event of the death or resignation of a regularly elected examiner, an alternate is to be chosen to fill his place. This fact should be carefully remembered by the House of Delegates at the coming meeting, when the members of the board for the ensuing year are to be elected, and only such members as will faithfully attend the sessions and do their duty, should be elected examiners. It is true that service on the board as an examiner is not a particularly pleasant nor grateful job, but none the less is it necessary, if we are to secure for the public that protection which is its right, that only the best men should be elected to perform this duty.

THE FRIENDLY (?) DRUGGISTS.

Assembly Bill No. 1164, an amendment to the medical practice act which, if it could have been enacted, would allow any pharmacist in the state to practice medicine and surgery, was introduced at the instigation of the local representatives of an association known as the National Association of Retail Druggists, or the "N. A. R. D." This fact is just learned from the publication of the association, "N. A. R. D. Notes," which closes its rather boastful article with the following sentence: "We commend this bill to the consideration of the druggists of every state that have legislative fights on their hands and counsel them that at times it is wise and necessary to 'fight fire with fire.'" In this instance the "fire" that needed fighting was a vicious bill introduced by Cleveland, providing

that the druggist could not sell any medicine of any sort without a physician's prescription. At the top of the article is a rather unusually poor cartoon depicting a corpulent doctor labelled "Dr. Trust," and an emaciated druggist refusing to sell a corn plaster to a child. Great credit for defeating the passage of this bill and for introducing, or having introduced the amendment to the medical practice act before referred to (A. B. No. 1164), is given to the N. A. R. D. representative in California; a man who seems to bear the rather appropriate name of Cheatham.

The STATE JOURNAL has done more to support and stand up for the pharmacist during the past two years than any other medical journal in the United States. We have never hesitated to speak out the truth and place the blame for some present evils in the drug business just where it belongs. Mr. Cheatham could have satisfied himself in 15 minutes that the State Society had nothing to do with the Cleveland bill, that in the opinion of those who had investigated the matter it was not a good bill, and that the medical men of the state, or a goodly majority of them at least, would have aided in trying to defeat it. But this he did not do, so far as we are aware. Instead, he very foolishly had introduced an amendment to the medical practice act which was bad on its face and which he could not by any possible means have lobbied through the legislature.

It certainly seems well for every member of the Society and every physician in the state to think this matter over carefully. Do the pharmacists through their association intend to repay us for what we are trying to do for them by impertinently meddling with what is none of their business? In the January number of the JOURNAL we published a letter from an official of the N. A. R. D. in which occurs the following: "It may be of interest to your readers to know that our organization department is making converts daily among physicians and druggists to the association's 'give and take' plan that is so effectually uniting the two professions in bonds of personal and professional unity and good will." Let us consider whether the impertinent and foolish efforts of this N. A. R. D. to amend the medical practice act is evidence of this "give and take" principle of "good will" that is supposed to work for unity. If, by encouraging the druggist we are going to aid and abet him in this sort of meddlesome assininity, let us by all means discourage him; let us establish our own drug stores and see to it that they are run decently and in a professional and ethical manner. Take it all in all, there has seldom appeared in print a more offensively impertinent article than the one here referred to; it is a direct slap in the face of every decent physician and particularly the members of our Society who have secured the present medical law and have fought for its unaltered retention on the statute books. Just think this thing over carefully and then let your druggist know your views.

HAVE WE WON THE FIGHT?

The JOURNAL takes considerable pleasure in publishing, on page 103, the full statement of a newly organized "Council on Pharmacy and Chemistry" of the American Medical Association. This statement was published in the *Journal A. M. A.* for March 4th, together with a long editorial on the subject. The editorial said just about what had been said editorially five years ago (*Journal A. M. A.* May 18th, 1900) and in addition acknowledged that the *Journal* had not followed the rule then adopted. Of course the very idea that the criticisms published in your JOURNAL may have had anything to do with this latest action of the Trustees of the A. M. A., is not to be found in the editorial; that would be a degree of broadmindedness hardly to be expected, under the circumstances; the child seldom kisses the hand that spans it. But your Publication Committee has known for some time that such a move was contemplated. In a letter from a friend in New York, very recently received, appeared the following sentences, which we beg permission to quote: "I do not know how far you are acquainted with what is going on below the surface in the American Medical Association. I am myself not in a position to get very much information, but I know enough to be able to tell you positively that you are not going to win in your fight for the purification of the advertising pages of the *Journal of the A. M. A.*—for the good and sufficient reason that you have won it already! I was delighted to learn last night that the special committee having that matter in charge are about ready with a report (which is certain to be adopted) which, while it may not cover all details that you favor, adopts the whole of the main situation, and means that the Augean stables are to be cleaned.* * * Another interesting conversation last week, revealed to me that the advertising departments of other journals than the one named above are scurrying about in some dismay as to how they are to be affected. * * * They are on the defensive in a losing fight. But it is for the purity of the medical profession, and to get a national association that a decent man need not be ashamed to belong to." The report of the committee to which our correspondent refers is that already indicated and will be found on page 103.

The work and the objects outlined by the Council on Pharmacy and Chemistry are desirable and in the highest degree commendable. We sincerely congratulate the Trustees upon their action. But is the proposed book to be the cemetery of information, and is it intended that the formulas of mixtures shall not be printed with the advertisements concerning them? If this is to be the case, the whole thing is a trick and a subterfuge unworthy of any honest man. Let us read Rule 1: "No article will be admitted unless its active medicinal ingredients and the amounts of such ingredients in a given quantity of the article, be furnished for publication."? Publication, where? In the proposed book, which is some day to be

issued? Or, as in accordance with the three times enacted rule, with each and every insertion of the advertisement of such article? There is the "joker." The rules of the new Council are but extensions of the rules of previous enactment; good rules, beyond a doubt, if carried out. But let us not be too sanguine; let us carefully watch the course of events and see whether the *Journal A. M. A.* lives up to these rules any more closely than it has to past rules. At the present time about half of the advertisements in each issue do not conform to the rule of 1895, 1900 and 1904, nor to the new rules of the Council. For 10 years there has been no perceptible indication of an honest desire to have the advertising pages conform to these rules or to any rules, save the commercial one of prompt payment of bills. If the time has arrived when there is to be made such an honest effort, we venture to say that nowhere in this country will there be greater rejoicing than right here in California; and particularly in the Publication Committee. But let us not rejoice prematurely; let us wait and see what will really happen.

AMERICAN MEDICAL ASSOCIATION. COUNCIL ON PHARMACY AND CHEMISTRY.

Chicago, Feb. 28, 1905.

To the Manufacturing Pharmacists and Chemists of the United States and to Others Concerned:—As the culmination of plans which have been under consideration for the past two years, the Board of Trustees at a meeting held Feb. 3, 1905, created by resolution an advisory board to be known as the Council on Pharmacy and Chemistry of the American Medical Association. The organization of the Council was perfected at Pittsburg, Pa., Feb. 11, 1905, and it herewith presents the following statement:

Preliminary Announcement.

It is the immediate purpose of the Council to examine into the composition and status of the various medicinal preparations that are offered to physicians, and which are not included in the United States Pharmacopoeia, or in other standard text-books or formularies. These preparations will include the synthetic chemical compounds, as well as the so-called proprietaries and pharmaceutical specialties put out under trademarked names. Preparations which conform to the standard established by the ten rules governing the matter, will be incorporated in "New and Non-Official Remedies," a book to be published by the Journal of the American Medical Association.

The general need of an accessible, authoritative work of reference of this character is obvious, for at present there is no such book to which the physician can refer. Its value will be proportional to its completeness. It is, therefore, proposed to be as liberal in approving articles for the book as is consistent with justice and equity to the public, to the manufacturing pharmacist and chemist and to the physician. The acceptance of articles will be determined by the appended rules, an examination of which will show that they are sufficiently liberal to permit the admission of all articles offered to the medical profession that are honestly made, ethically exploited, and worthy of patronage by intelligent physicians.

The acceptance of an article will be based on a careful and unprejudiced examination of the accessible information from all sources, and in compliance with the adopted rules. An acceptance, however, is not to be interpreted as an endorsement, neither is omission from the list to be construed, in every case, as condemning an article; it may mean that the necessary information has not been obtained. The Council does not pass judgment on the therapeutic value, but on the ethical status only. The Council does not presume to dictate what preparations should be prescribed; nor is it the present intention to conduct an active campaign against fraudulent products; but merely to supply necessary and desirable information concerning those which it considers unobjectionable.

The plan for the work is briefly as follows: All available information regarding a product will be secured from the manufacturer and from other sources. This information, together with specimens of the article, will be submitted to a committee of experts, who will examine critically into the product, consider the claims made for it, and make a report. On the basis of this report, the Council will accept, reject, or hold for further consideration. If accepted, the information will be condensed and arranged somewhat on the plan of the United States Pharmacopoeia, but with the addition of brief pharmacologic and therapeutic data. The

Council believes that there are many articles, at present not recognized by the Pharmacopoeia, which comply with the required standard and do not need any further investigation. In this class come many of the synthetics as well as many well-known pharmaceutical specialties. These are now being written up and it is proposed to issue the first edition of the book as soon as possible. No charge will be made for representation in the book.

As fast as new articles are accepted, all information regarding them will be published in *The Journal of the American Medical Association*, and will be incorporated in the next edition of the book.

The Council appreciates the importance and difficulties of the work to be undertaken and does not expect to take a step forward without being sure that it is right and just to all concerned. It does not dare to hope for perfect results and can only promise to strive earnestly, honestly and impartially to avoid serious errors of commission and omission. It asks for the hearty co-operation and assistance of those it believes to be interested in the work—the entire medical profession and all honorable manufacturing pharmacists and chemists. Criticisms and suggestions will be welcome.

Rules Governing the Admission of Articles.

The following rules are adopted to guide the Council on Pharmacy and Chemistry of the American Medical Association:

(The term "article" shall mean any drug, chemical or preparation used in the treatment of disease.)

Rule 1.—No article will be admitted unless its active medicinal ingredients and the amounts of such ingredients in a given quantity of the article, be furnished for publication. (Sufficient information should be supplied to permit the Council to verify the statements made regarding the article, and to determine its status from time to time.)

Rule 2.—No chemical compound will be admitted unless information be furnished regarding tests for identity, purity and strength, and, if a synthetic compound, the rational formula.

Rule 3.—No article that is advertised to the public will be admitted; but this rule will not apply to disinfectants, cosmetics, foods and mineral waters, except when advertised in an objectionable manner.

Rule 4.—No article will be admitted whose label, package or circular accompanying the package contains the names of diseases, in the treatment of which the article is indicated. The therapeutic indications, properties and doses may be stated. (This rule does not apply to vaccines and antitoxins nor to advertising in medical journals, nor to literature distributed solely to physicians.)

Rule 5.—No article will be admitted or retained about which the manufacturer, or his agents, make false or misleading statements regarding the country of origin, raw material from which made, method of collection or preparation.

Rule 6.—No article will be admitted or retained about whose therapeutic value the manufacturer, or his agents, make unwarranted, exaggerated, or misleading statements.

Rule 7.—Labels on articles containing "herole" "poisonous" substances should show the amounts of each of such ingredients in a given quantity of the product.

Rule 8.—Every article should have a name or title indicative of its chemical composition or pharmaceutical character, in addition to its trade name, when such trade name is not sufficiently descriptive.

Rule 9.—If the name of an article is registered, or the label copyrighted, the date of registration should be furnished the Council.

Rule 10.—If the article is patented—either process or product—the number and date of such patent or patents should be furnished. If patented in other countries, the name of each country in which patent is held should be supplied, together with the name under which the article is there registered.

Explanatory Comments on the Rules.

Rule 1.—Certainly no one can object to this rule. The physician not only has the right to know, but it is his duty to know, the composition of medicines he prescribes for his patients. He may not be interested in the details of the method or of the process of manufacture of an article, but he should know what medicinal agents it contains, and the amounts represented in a given quantity of the article.

Only in exceptional instances is it necessary for the physician to know the solvent, vehicle or diluent, or the particular flavoring agent which may have been employed. For this reason, while the Council desires the formula and the details as to the method of preparation to be sufficiently complete to enable it to verify the correctness of the assertions made regarding an article, the description to be published will usually consist only of a statement of the amount of each medicinal agent or ingredient in a certain quantity—generally the ordinary dose—of the article, and in some instances the general character of the solvent or vehicle and flavors.

In preparations for external use, the therapeutic efficiency is greatly influenced by the nature of the vehicle. Therefore, in such preparations, the character of the vehicle or base should be stated, so that it may be known whether the article is penetrative or simply protective.

Rule 2.—In order to avoid errors in the case of chemical compounds and to guard against adulterations, lack of potency or strength and mistaking one chemical for another, it is necessary to have at hand suitable identity

tests. Where these facts have appeared in the literature, or in standard text-books, reference to them will be sufficient, but with new chemicals, especially synthetics, the manufacturer or his representatives will be required to supply such tests to the Council, together with the rational or structural formula, in order that an intelligent opinion of these products may be obtained.

Rule 3.—While the correctness of the principle that physicians can not be expected to favor any medicine which is exploited to the lay public will be readily conceded, this rule is to be modified in its application to articles not strictly medicinal.

Rule 4.—This rule may appear to some as radical, and yet on consideration it will be found just to the public, to the physician, to the manufacturing pharmacist and chemist, and also to the retail druggist. It must be remembered that it applies only to the package, and to the labels, circulars, etc., accompanying it. It does not in any way interfere with advertising, circulars, literature, etc., furnished to physicians. Experience has clearly shown, however, that it is not safe to enumerate on the package the diseases in which an article may be indicated, since this is also the means by which the laity, who are not competent to determine whether or not its employment is safe and proper, may be induced to continue its use or to recommend it to others quite regardless of the evident dangers of forming drug habits or of doing serious injury by employing a remedy that in reality may be contraindicated. It is the physician's prerogative to determine in what disease the article may be indicated, and he is not supposed to go to the drug store for his knowledge regarding this. It is not the function of the pharmacist to recommend or to prescribe medicines, but only to be familiar with their pharmaceutical and chemical characters, strength and dosage and with the best forms of administration.

It is asserted that the naming of diseases on the label of the package is necessary, because many physicians will be unable to tell from the therapeutic properties alone in what diseases a medicinal article may be indicated. This may be true with a certain class of doctors, but it is certainly not true with the vast majority of the educated, progressive physicians of America, and this is the class whose interests are concerned in this movement. There may be some exceptional articles, such as foods, digestants and mineral waters, in which the therapeutic properties alone may not sufficiently indicate the use, and in these cases, perhaps, reference may be made to certain symptoms; if such references appear they will be carefully considered. Antitoxins and vaccines come under this exemption. The Council, however, is unanimously of the opinion that this method of exploiting the medical profession is one of the principal causes which has made the best physicians hesitate to prescribe any proprietary medicines, has led others into irrational therapeutics, has made pharmaceutical tyros believe that they could prescribe just as well as the physicians, and has been the means of causing scores of these medicines to be used for self-medication by the laity, to the detriment and sometimes to the serious and permanent injury of the person taking them. The physician would prefer that the manufacturer confine himself to furnishing the articles and reasonable information regarding their identity, quality, strength and pharmaceutical and chemical character, leaving the physician to indicate in what diseases they should be used.

It is believed that the application of this rule will most quickly determine what manufacturers would rather have the preference and favor of the vast majority of the medical profession and of the members of the American Medical Association than the doubtful support of a rapidly disappearing minority of practitioners.

Ample time will be given manufacturers to conform with this rule, and also Rule 8, entailing changes in labels or in other printed matter.

Rule 5.—While this is a rare contingency, yet in the past many rank frauds of this nature have been perpetrated on the profession, and this rule will have a tendency to prevent such attempts in the future.

Rule 6.—As in the preceding instance, this rule will have a tendency to restrict manufacturers or agents in their claims as to the therapeutic superiority of their products, without interfering with any reasonable assertions, especially when such are confirmed by clinical data from responsible medical men.

Rule 7.—For the information of the pharmacist or dispenser, and to enable him to act as a safeguard to the patient and to the physician, all medicinal articles containing such potent agents as the poisonous alkaloids and other organic substances and the salts of some of the metals, should have the exact amount of these ingredients contained in the average adult dose stated on the label. A list of these potent substances will be prepared with more specific information.

Rule 8.—In order to prevent the confusion now existing with reference to many articles known only by more or less arbitrarily selected or coined, usually protected names, it is necessary that every article which is intended solely for physicians' use or prescription be designated by a scientific title or by a name descriptive of its pharmaceutical character, and, as far as practicable, of its principal medicinal constituents. Synthetic chemical products should give the true chemical constitutional or structural name, in addition to the trade name. The application of this rule will enable physicians to use many of these articles which at present they are afraid to use

because of uncertainty as to the identity—owing to the similarity in the names of many of these entirely different products—or prefer not to prescribe in order to avoid criticism and the danger of self-prescription by their patients. This provision will thus be of great benefit to manufacturers of meritorious products, will relieve pharmacists of many trying situations in interpreting correctly the names of articles desired by physicians, and will protect both physicians and laity from the evils named.

The Council will use reasonable discretion in enforcing this rule with reference to trade names of long-established articles.

Rules 9 and 10.—This information is desired to enable the Council, and others interested, to determine the legal status of these articles and for ready reference through publication.

Respectfully submitted.

ARTHUR R. CUSHNY, Ann Arbor.

C. LEWIS DIEHL, Louisville.

C. S. N. HALLBERG, Chicago.

ROBERT A. HATCHER, New York.

L. F. KERLER, Washington.

J. H. LONG, Chicago.

F. G. NOVY, Ann Arbor.

W. A. PUCKNER, Chicago.

SAMUEL P. SADTLER, Philadelphia.

J. O. SCHLOTTERBECK, Ann Arbor.

GEO. H. SIMMONS, Chicago.

TORALD SOLLMANN, Cleveland.

JULIUS STIEGLITZ, Chicago.

M. I. WILBERT, Philadelphia.

H. W. WILEY, Washington.

Members of the Council on Pharmacy and Chemistry,
American Medical Association.

AMENDMENTS TO THE CONSTITUTION;

SECOND PUBLICATION.

ARTICLE VI.

SEC. 2. The officers, except the Treasurer and the Councilors, shall be elected annually. The terms of the elected Councilors shall be for three years, those first elected serving one, two and three years, as may be arranged. (All of these officers shall serve until their successors are elected and qualified.)

SEC. 3. No Delegate shall be eligible to any office named in the preceding section, except that of Councilor, and no person shall be elected to any such office (who is not in attendance upon the Annual Session and) who has not been a member of the Society for the past two years.

SEC. 4. The selection of the place of meeting, and the election of officers, shall be the first order of business of the House of Delegates at the second evening session of each annual meeting.

SEC. 5. All officers shall be elected by ballot, and shall serve until their successors are chosen and qualified.

The portions of sections 2 and 3 in parenthesis are to be dropped; sections 4 and 5 are to be added.

The Rubaiyat, After Osler.

Heretofore the STATE JOURNAL has refrained from inflicting upon its readers poetry, genuine or otherwise, and we certainly feel that a considerable amount of gratitude is owing to us on this score. There has never been made a definite rule of the Publication Committee covering this point, but it has been almost an unwritten rule that poetry "don't go." The present is an exceptional case, and the following lines, unsigned, are so pertinent to the Osler foolishness that has recently permeated the press, both lay and medical, that we cannot refrain from inflicting them upon you:

So, when the Angel with the Esmarch Mask
At last shall bid you to lay down your Task—
And whelm your Soul with Breath of Chloroform,
You shall not shrink from it, nor Respite ask.

Why, if the Soul can thus be Oslerized
And shed the Senile Flesh, at one Time prized.

Were't not a Shame, were't not a Shame for It
To, crippled, wait till with Time gormandized!

IMPORTANT NOTICE TO MEMBERS.

The Thirty-fifth Annual Session of the State Society will be held at the New Glenwood Hotel, Riverside, April 18th to 20th.

The special hotel rates will be \$2.50 for room without bath and \$3.00 for room with bath, on the American plan—including meals. For those desiring to stop off at Los Angeles the Van Nuys Broadway, offers a special rate of \$2.50 per day, American plan.

Both the Southern Pacific and the Santa Fe have made the usual arrangement in regard to rates; the fare will be one fare and a third for the round trip. When you purchase your ticket be sure and get a Receipt Certificate; this must be signed by the Secretary at the meeting. You pay full fare going and when you present your receipt certificate duly signed by the secretary, your return ticket will be issued for one-third the full fare.

Members from San Francisco or points north of there can leave foot of Market street at 5 P. M. (The "Owl"), arriving in Los Angeles at 8:55 A. M.; or at 10 A. M., reaching Los Angeles at 7:05 A. M. On the Coast Line, leaving Third and Townsend streets, there are two trains available, one leaving at 8 A. M. and reaching Los Angeles 10:25 the same day, and the other leaving at 5:45 P. M. and getting into Los Angeles at 11:15 the following morning.

Leaving Los Angeles for Riverside, there are five trains on the Southern Pacific: 8:05, 9:00 A. M., and 12:10, 4:25 and 5:25 P. M.

On the Santa Fe there are four trains leaving Los Angeles for Riverside: 7:30 and 10:45 A. M., and 4:30 and 5:05 P. M.

The local committee is arranging to give the members who attend a most cordial welcome. One afternoon will be given up to a drive about the country, visiting an orange grove or so on the way; a game of polo may be witnessed, and other interesting matters will be provided. On Wednesday evening it is proposed to have an informal dance, and on Thursday the banquet. Wines will be served at meals as ordered by guests.

THE SCIENTIFIC PROGRAM.

Tuesday morning; 1st General Session. Address of Welcome by the President of the Riverside County Medical Society, Dr. W. W. Roblee. **Symposium on Typhoid Fever.** This will be discussed under 7 subjects by Drs. C. M. Cooper, San Francisco; E. W. Twitchell, Sacramento; F. C. E. Mattison, Pasadena; Claire Murphy, Los Angeles; S. J. Hunkin, San Francisco; P. C. H. Pahl, Los Angeles; Ray Wilbur, Stanford University; Geo. B. Rowell, San Bernardino; and W. E. Bates, Davisville.

Wednesday morning, 2nd General Session. 1, Address by the President, Frank Adams; 2, Report of Committee on Tuberculosis, F. M. Pottenger; 3, Hopes, Disappointments and Successes of the State Board of Health, N. K. Foster; 4, Maritime Quarantine, Hugh S. Cumming, U. S. P. H. & M. H. Service; 5, Report of and Suggestions on the Work of the State Board of Medical Examiners, Dudley Tait; 6, Admission to Medical Courses of Persons with Defective Preliminary Education, with Suggestions for the Remedy, Lincoln Cothran.

Thursday morning, 3rd General Session. Symposium on Diseases of the Gall-bladder and Ducts. This will be participated in by papers and discussions from the following members: H. C. Moffitt, San Francisco; Geo. L. Cole, Los Angeles; Ernest B. Hoag, Pasadena; H. A. L. Ryfkogel, San Francisco; A. J. Lartigau, San Francisco; Stanley Black, Los Angeles; A. H. Mays, Sausalito; Emmett Rixford, San Francisco; A. S. Lobingier, Los Angeles; Stanley Stillman, San Francisco.

The arrangement for the afternoon sessions, subject to revision by the Committee on Program, is as follows: **Tuesday; Genito-Urinary and Skin;** 1, Circumcision, by Geo. E. Abbott, Pasadena; 2, Erythema Keratodes, by A. Garceau, San Francisco; 3, Conveyance of Syphilis by Medical Men, by D. W. Montgomery, San Francisco; 4, Remarks on Use and Abuse of X-ray, by A. B. Grosse, San Francisco; 5, Indications for Roentgen Therapy, by P. M. W. Lehman, San Francisco; 6, Practical Application of Functional Diagnosis in Unilateral Kidney Lesions, by M. Krotoszyner and W. P. Willard, San Francisco. **Medicine, Pediatrics and Obstetrics,** with the fol-

lowing papers: 1, Prevention of Disease, by F. M. Bruner, Santa Ana; 2, Analysis of Deaths from Tuberculosis in Los Angeles for the Year 1904, by Geo. H. Kress; 3, Difficulties in Substitute Feeding, by A. B. Cowan, Fresno; 4, Adams-Stokes Syndrome with Report of Two Cases, by S. H. Gordan, Santa Ana; 5, Uncinaria in California, with Specimens, by Herbert Gunn, San Francisco; 6, Human Glanders in California with Report of a Case, by Wm. Fitch Cheney; 7, Case of Poisoning by Ceonthus Velutinus, by R. F. Rooney, Auburn.

Thursday afternoon; Surgery and Gynecology; 1, Adolescence in Girls, by F. R. Burnham, San Diego; 2, When to Operate for Fibroid of the Uterus, by Rose Bullard, Los Angeles; 3, Multiple Tenotomy for Relief of Spastic Paralysis, by A. M. Henderson, Sacramento; 4, Report of Cases (a) Ulcer of the Stomach and Duodenum, and (b) Primary Carcinoma of the Appendix, by J. H. O'Connor, San Francisco; 5, Hernia, by F. O. Witherbee, Los Angeles; 6, New Interdental Splint for Fractures of the Lower Jaw, by Raymond Russ, San Francisco; 7, Radical Cure of Umbilical Hernia, by A. W. Morton, San Francisco. **Eye, Ear, Nose and Throat Diseases;** 1, Operation on the Nasal Septum, by Grant Selfridge, San Francisco; 2, Adenoids from the Standpoint of the Parent and the General Practitioner, by R. L. Doig, San Diego; 3, Cerebral Abscess Following Acute Suppurative Otitis Media with Mastoiditis, by Hill Hastings, Los Angeles; 4, Relation of Chronic Otitis Media to Other Diseases of the Ear and the Operative Treatment, by C. F. Welty, San Francisco; 5, Misuse of Atropin in Eye Diseases, by L. C. Deane, San Francisco; other papers the titles of which are not yet received.

The Committee on Program has endeavored to keep the number of papers to be read within reasonable limits. In addition to the above list other papers have been submitted and they will be presented in the event that there is time for them without crowding from the program regular papers as listed. The Committee has desired to have fewer papers and give more time for their careful presentation and discussion than has sometimes been the case.

A CONSIDERATION OF CONGENITAL DISLOCATION OF THE HIP.*

By HARRY M. SHERMAN, A. M., M. D., San Francisco.

THE study of congenital dislocation of the hip, began, so far as its present development is concerned, by Hoffa in 189—, has gone on by definite steps—the scientific advance being quite undisturbed by the hysterical wave, begotten and nourished by the irresponsible daily newspapers, in 1902, when Lorenz came to this country.

Hoffa's first plan was to gain access to the site of the acetabulum by an incision behind the trochanter, necessitating the cutting of important pelvi-trochanteric muscles. Not only was this a disadvantage in itself, but the acetabulum had to be approached by a devious and difficult path between the ilium and the femoral head. Lorenz improved the technique immensely when he devised, advocated and practiced the making of the incision anterior to the trochanter, approaching the acetabulum directly and without really cutting any muscles, for the incision was made in the direction of the muscular fibres and was a muscle splitting and not a muscle cutting. In each operation the acetabulum was deepened and enlarged to make an incompetent into a competent socket, it being the belief then, that the chief deformity lay in the saucer shape of the acetabulum. That the Lorenz incision was the better, Hoffa acknowledged by adopting it, and in 1895, when I was in Wurzburg, it was the incision he was using. The method was a satisfactory one so far as putting the femoral head into an acetabulum was concerned, but the results were in many, very many instances, disappointing. This I found out in my own cases in which I had followed carefully the Hoffa-Lorenz technique, for not a few relaxed and others became ankylosed.

The relaxations were surely due to the impossibility of adapting the acetabulum to the head and the head to the acetabulum. Each bone was deformed, the acetabulum being anything from a cup-like hollow, or a saucer-like hollow to a little patch of cartilage in the shape of an ear or pear, in the proper site, but with no hollow at all, and the head being anything from a practically normal head to a little cartilage-encrusted nodule of bone on the side of the femur. Neither fitted, and the remodelling of either to exactly fit the other so that an anatomical result and a satisfactory function might be secured, proved an impossibility. It seems to me that this difficulty in the proposition must be so plain that further remarks on it are not necessary.

The cases which became and remained ankylosed require more comment. In these cases the hips were found, after the operation wounds had healed, to be in proper position—the head in the acetabulum—but while they had at first an ample practical range of motion they soon came to have only a limited range of motion and finally no motion at all. From this point two courses were apparently possible; either the ankylosis became firmer and firmer, or after a time it gradually became less, and an amount of motion developed which was ample in range for ordinary uses; that is, ample practical motion was secured. The cause of the ankylosis was a pertinent one, and, while I cannot speak from the standpoint of one who has opened a joint at this time and seen the condition inside it, I can speak from the standpoint of one who has examined and manipulated such joints. The explanation offered is reasonable and simple. From the cancellous tissue of the deepened acetabulum, the cartilage having been removed in the process of deepening, granulation tissue grew for the purpose of repair. This adhered to and enveloped the femoral head, and as it became older and firmer, less cellular and more fibrous, it contracted and fastened the head more and more firmly in one position. It seemed that this condition could be almost seen, so perfectly does

the explanation account for the sensation gotten by forcibly moving the hip in this stage, while the child is anesthetized. At first, resistance was encountered; then this yielded as if something tore and motion was permitted, but with crepitation in the joint, which was softer and moister in those manipulated earlier, and harder and drier in those manipulated later. In the cases that remained ankylosed this bond—not disturbed by manipulation or reforming after it—became stronger and shorter, while in those that gradually secured practical motion there must have developed a pseudo-arthritis between the femoral head and the granulation tissue or fibrous tissue floor of the acetabulum, and it is not inconceivable that there was a regeneration of articular cartilage so that in time, an approximation to a normal acetabulum resulted.

However, the results in these cases—though only nine or ten in number—were not good enough to satisfy me. I was quite ready for the next step when it came.

In 1887 Paci, of Pisa, began the reduction of congenital dislocation of the hips by manipulation, using circumduction movements, as in accidental dislocations, but in all his actions he was careful to commit no trauma. Lorenz saw the method demonstrated in 1894, and some time after he had returned home he tried it, and believing that he got good results from it he has continued the practice of it. Lorenz, however, practiced and advocated the use of great force, putting the limb into unnatural abduction, forcing the femoral head with violence to and, if he could, into the acetabulum and this with the result of committing traumas not inconsiderable in character or number. These include fractures of the femur and of the pelvis; paralysis of the anterior crural and sciatic nerves; rupture of the femoral vein and one case of total gangrene of the limb. In addition he had deaths due to chloroform and to shock. Other operators by the method reported similar casualties. Hoffa and Heusner tore the vulva and the urethra, fractured bones and separated their epiphyses, had paralysis of the nerves of the part, and got large hematomata, some of which suppurated. Kummel states that unfortunate occurrences are not rare, and Ridlon, who has but recently published his statistics, acknowledges fractures of the femur.

Finally from personal observation in the course of operation on one of Lorenz's cases, I know that he lacerated the capsule, thrust the head through the rent and left it outside the joint, among the muscles in the outer part of Scarpa's space, where it could be felt just beneath the fascia lata. And I have seen other cases where the head was in this same superficial location which it could only have reached, I believe, by a similar mutilation. These confessions of disasters are quoted from various recent publications, chiefly a paper by Davis of Philadelphia, in the *American Journal of Medical Sciences* of 1903. But when I, sometime in 1897, first began the use of the method,—the method of reduction by manipulation, which has come to be known as the "bloodless" method, but which should be called, because of the man who originated it and the other who popularized it, the Paci-Lorenz method—this tale of mishaps had not been told, and I, in the thirteen hips on which I practiced, was fortunate enough to have no such accidents, though the very extensive ecchymosis that followed the operation showed that a really decent amount of force had been used. The ecchymosis itself was of no moment, but I found that, out of thirteen cases in which I easily put the femoral head in or on the acetabulum, only one was an anatomical reduction, and could be counted on to stay reduced and to be a functional hip; one more was what is now called an anterior transposition. All the others were unqualified failures in that they relaxed, either in the plaster of Paris splints or very shortly after taking them out of these retentive dressings.

*Read at the meeting of the Oregon State Medical Association, August 30-31, 1904.

One success out of thirteen cases—for I do not count an anterior transposition a success—did not satisfy me. I abandoned the method in 1899 and have not returned to it. It is pertinent at this point to inquire if others were more fortunate than I in the method, and I quote again from the paper of Davis, already alluded to: In Schede's clinic, reported by Petersen, there were 113 cases with 6 cures. In Mikulicz's clinic, reported by Drehmann, of 128 hips in which the reposition is said to have been accomplished, in 70 it is stated to have been permanent, while in the others relaxations or transpositions were the final results.

Heusner, in 1899, considered the results excellent in 10 per cent of the cases, good after long treatment in 30 to 50 per cent, and unpromising in the rest. Ludloff claimed 9 satisfactory results in 11 cases. Kollicher reported only 2 cures in 51 hips, Codivilla 4 or 5 cures in 66 cases, and Kummel only about 5 per cent of cures. Hoffa then reported 5 cures in 64 hips. Wolff's claims were for 25 per cent cured. American operators have not done any better, and Kirrison, of Paris, says that perfect reposition is rarely attained. Now Lorenz reported, in 1900, 108 anatomical results in 212 cases. This matches Mikulicz's statistics which gave something more than 50 per cent of successes. How can we reconcile these various statements? Davis says, "If one is critical, as is the case with Kirrison, Hoffa, Kollicher, Schede, Codivilla, and others, then one will call 5 per cent cured. If one is more easily satisfied, then the cures will amount to 50 per cent, as in the case of Lorenz, or more, as in the case of Mikulicz." In this I wholly concur, for judging the work of Lorenz in the light of the cases and results he left scattered through America, I do not believe his anatomical results are any more than the average 5 to 10 per cent, and I cannot accept the reports from Mikulicz's clinic as representing the real facts there.

Now there are reasons, other than natural skepticism, other than statistics, for my doubting the statements of those reporting such high percentages of anatomical reductions, and they are these: I have opened, in all, 41 hips of this kind. In all but one I have found the condition originally described by

capsule is stretched across the hollow of the acetabulum from rim to rim; above it the capsule is distended to envelop the head. Both above and below



Figure 2.

the capsule has its normal attachments. The acetabulum occluded by the drum head arrangement of the capsule, Lorenz called the acetabular pocket, and

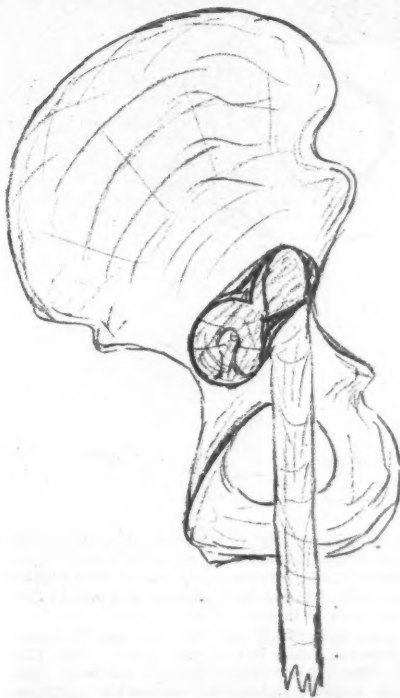


Figure 3.



Figure 1.

Lorenz long ago, a contraction of the capsule at the upper, or upper and posterior part of the acetabulum, at the place where the capsule leaves the acetabulum and reaches up to the displaced head. It is very like an hour glass contraction. Below it the

Bradford named the narrowed part in the capsule, the hymen of the acetabulum. Now this acetabular hymen must be ruptured to permit the penetration of the femoral head to the socket of the acetabulum. If this be not done the head is merely put on the capsule occluding the acetabulum, with a double layer of capsule between the two bony parts, and is, of course, in incomplete and unstable reposition. However, in the 41 cases of which I have definite surgical knowledge, this would have been possible in only one—in one case the acetabular hymen practically did not exist and the case would have been a perfect one for the manipulative method. In all the others the opening was so small that my forefinger could with difficulty be passed through it, and in some the passage was actually impossible to the finger. I am safe in



Anterior Location.

Figure 4.

the assertion that in not one of these forty cases could any one in the world have made an anatomical reposition by manipulation, and yet they were exactly like the cases in which Lorenz and Mikulicz were claiming over 50 per cent of cures.

What do these men really get who change the position of the femoral head but do not put it into the acetabulum? The result they secure Lorenz has called anterior transposition, the posterior location of the head on the dorsum of the ilium is changed for an anterior location, the head lying above and in front of the acetabulum, and, if possible, under the long head of the rectus femoris and the anterior inferior spine of the ilium, though in not a few cases the head—owing to the twist which is often present in the shaft of the femur—is directed forward, and does not get the somewhat stable position under the head of

the rectus. This position is a better one than that on the dorsum, and the deforming lordosis is done away with, but the head is still outside the acetabulum, the support of the body must be by ligaments and not by natural bony parts. The leg is short, and there is a swaying limp in the walk to balance the trunk over the unstable joint. It may be granted that conditions are improved, but the goal sought has not been attained, the dislocation has not been reduced.

It has not seemed to me sensible or right to stop at this point. Surgeons who find mechanical obstacles to the reduction of a traumatic dislocation remove those obstacles by a cutting procedure. I am quite unable to see why cutting should be barred in this case when it is so universally resorted to in all other kinds of cases in all other parts of the body. To taboo the knife here and turn to it elsewhere is illogical. And it chances that but very little cutting is necessary and it can all be restricted to fibrous tissues, even the muscles being split and not cut. Acting on this idea I began in 1898 reducing congenital dislocations of the hip by means of an incision which laid open the acetabular hymen and gave free access for the head to the socket, and since then I have practiced no other method. The method really reduces, it puts the femoral head actually into the acetabulum, cartilage to cartilage. By it I can do the thing I set out to do. But I do not deepen the acetabulum and so expose cancellous bone and invite ankylosis, and the result is that all of the hips have motion. In the younger children, under six years old, this motion comes easily and naturally simply from the use of the limb. In the older children it comes more slowly but still it comes. The stability of the reposition depends, in the first place, on the mutual adaptation of the head and socket. If these are well suited to each other the reposition is stable; if either is incompetent—the socket too small or too shallow, or the head stunted and misshapen—the reposition is likely to be unstable and a supracotyloid relaxation to occur. This result can be sometimes averted by prolonging the splint restraint and making the parts work in contact, so that use together shall force a mutual remodelling. This is exactly what Lorenz does with the cases he subjects to the "bloodless" method. If after 8 to 12 months of being held together the head and socket still refuse to make a mechanical joint, either the time of splint restraint may be prolonged in the hope that the obdurate parts will yield, or the hip may be permitted to go into the supracotyloid luxation, accepting this position at the end of a treatment which has included real reduction and efficient and prolonged restraint in that position instead of accepting it at the beginning as an anterior transposition.

I have only operated in all on thirty hips by this method. I had the statistics regarding 28 of them looked up last April and they are equally good now, and have to be corrected in but one particular, the case of an eleven year old girl whose hip I reported as a stable reduction, but which I have since found to be a relaxation. I report now 30 hips in 21 children. The oldest was eleven years, the youngest ten months. Eighteen hips are known to be in stable reduction at times varying from six years to two months. Nine hips are known to be relaxed or subluxated. In three cases the final result is unknown. Studying these figures in the light of the failures, and taking cognizance of the improvement in my manual skill in the operation and the improvements which I have come to institute in the after treatment, I am inclined to believe that the stable repositions in young children should be 90 per cent, but this must be taken frankly as an optimal estimate, not as a statement of statistical facts.

The technique of the operation as I have come to do it, is as follows: The child is placed on the table with a sheet, rolled diagonally into a soft sort of rope,

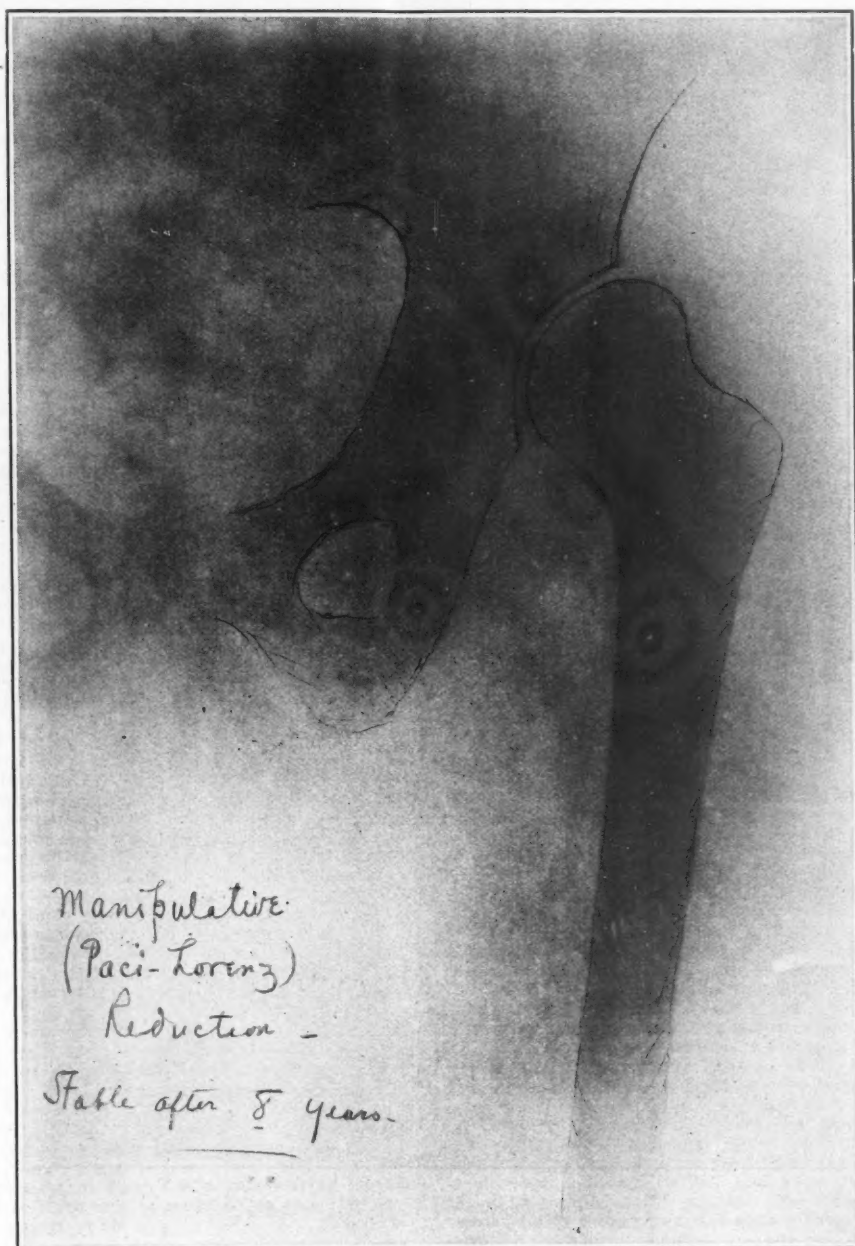


Figure 5.

Figures 5 and 6 show the similarity of the end results after successful manipulative reduction, and after reduction through an incision. Granting the value of the former includes the granting of the value of the latter.

between the thighs. The ends of this rolled sheet reach up beyond the child's head and are attached to a stout ring in the wall of the room. The part which is between the thighs is wrapped with a wet sterile towel and arranged so that it lies directly under and across the ischial tuberosity of the side on which the operation is to be done. It must not lie across or cover the genitalia. This sheet gives a safe and sufficient counter traction in case any amount of force is needed to pull the femoral head down to

the level of the acetabulum. Around the thigh, just above the knee is fastened a skein of yarn, by a clove hitch, and another is put around the ankle in the same way. Traction on either or both of these is permissible, up to limits which seem safe, and that without injury to the skin.

A moderate pull is then made on the leg which draws the femoral head down from its usual location on the dorsum of the ilium and brings it just below the anterior superior iliac crest, where it is easily

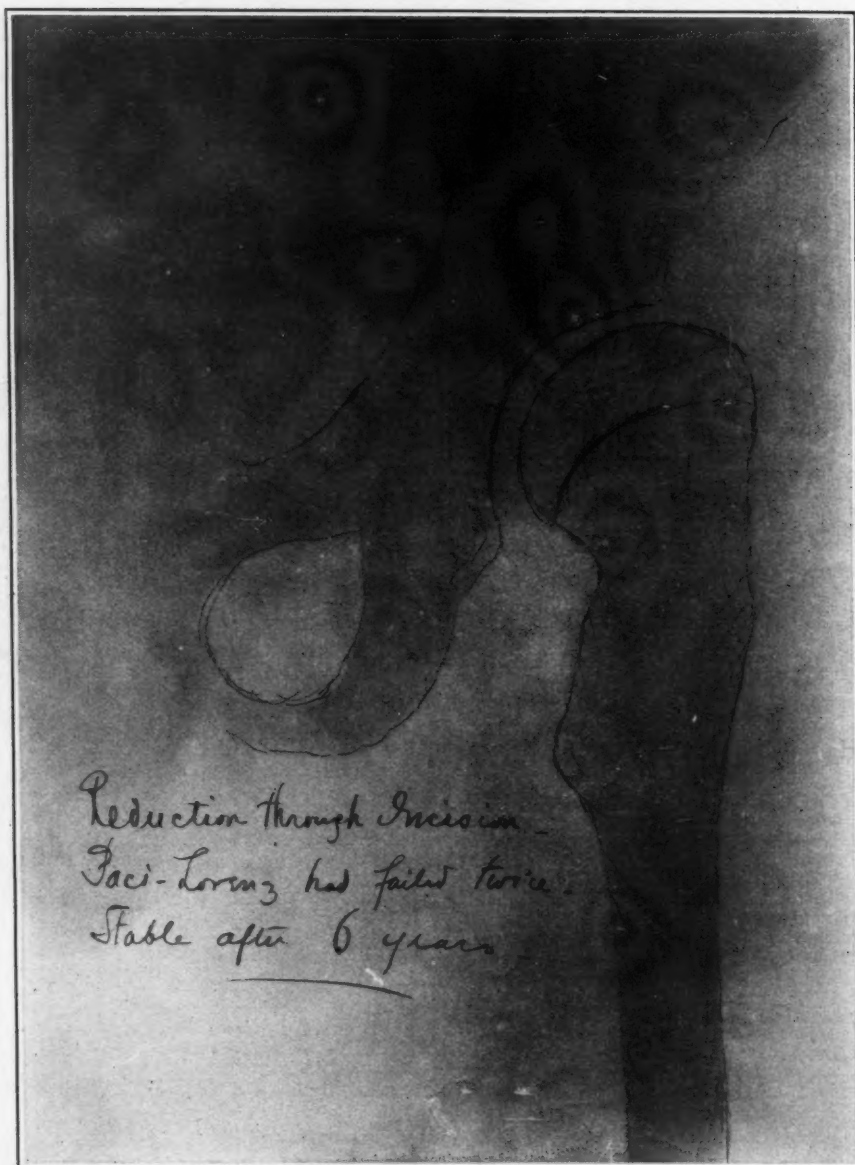


Figure 6.

palpable. The incision advised by Lorenz is then made; cutting skin, subcutaneous fascia, fascia lata, and finally the muscle and all in the direction of the muscular fibres so that these are separated and not cut. This exposes the capsule and it is incised in the same direction showing the femoral head inside it. Deep retractors have been used to hold the tissues apart, but now long loops of catgut are put in either side of the incision in the capsule and they act as retractors. In older children it is right to do a subcutaneous section of the adductor tendons close to the pubes.

The pull on the leg is now relaxed, the femoral head goes up and the gloved finger is slipped into the capsule and down toward the acetabulum. Very rarely indeed will it be able to enter the latter, though

flexion of the hip relaxes the anterior part of the capsule and so makes the opening somewhat larger. On the finger, as a guide, a long, straight probe-pointed bistoury is passed into the acetabulum, and while the finger in the wound presses its edge downward against the lower part of the capsule, the hand on the outside slowly saws the knife to and fro. The cut thus made must be close to the femur and must especially avoid the anterior part of the capsule. Care must be taken not to cut off the ilio-psoas tendon, but the incision must be ample enough to give free access to the cavity of the acetabulum.

Now the femoral head is again pulled down from the dorsum of the ilium, by hand traction on the leg or on the yarn skeins, or, in older children, a tackle of blocks and rope may be used to overcome the re-

sistance of shortened muscle and fascia. When the head is over the acetabulum it may, in some instances, be thrust into the socket by firm pressure inward over the trochanter. Sometimes this maneuver has to be combined with abduction of the leg, made while the traction is maintained, the operator pressing the whole firmly on the trochanter and supplying a fulcrum so that the head may be made to travel downward and inward and jump over the acetabular rim into the socket. There is one objection to the traction for it makes a pull on the anterior fibres of the capsule and narrows the opening, and so occasionally one finds that, after reasonable efforts at it, in which the capsule has probably become somewhat stretched, flexion of the hip and manipulation of the leg—the direction of the movements being guided by the finger in the joint—succeed in slipping the head into the acetabulum with the use of no force at all. In not a few instances, in young children, two to four years old, this may be done primarily, without the preliminary pull on the leg.

In a fair proportion of these cases there is a twist of the upper part of the femoral shaft so that the neck and head look forward when the toes are pointed in the same direction. Whether this is the case or not can always be determined by radiograms, one taken with the toes pointing forward and another with the limbs rotated out. If there is the twist forward in the bone, it will be necessary to compensate for it by rotating the whole limb inward during the manipulations to direct the head into the acetabulum. Once the head is in the acetabulum the limb is put into a position of abduction, of from 50° to 90°, and rotated in or not as may be necessary. This position thrusts the head more firmly into the acetabulum and prevents relaxation. The two retracting loops are now tied together to close the upper part of the incision in the capsule. The lower part of the incision has, by the act of reduction, been carried so deeply into the limb that it cannot be reached to be sutured. Sutures are then put in the fascia, deep and superficial, leaving space for the insertion of a cigarette drain down to the capsule. Finally the skin is sutured and then both limbs and the pelvis put into a double plaster of Paris spica. Even if but one hip is operated upon both limbs must be included in the first retentive plaster dressing. After forty-eight hours the drains are taken out, and, if there has been no sepsis, the leg is left undisturbed for three months. If sepsis occurs it is right to relaxate to avoid an ankylosed hip.

After three months the spica is taken off, and the limb adducted somewhat and another spica put on, including only the leg of the side of the operation in the one-sided cases, both legs in the double cases. After another month or so this may be arranged so as to leave the foot free, and the child may then be made to walk in the plaster. After six months have elapsed the spica may be made only to include the thigh and pelvis, leaving the knee free. After eight or nine months this retentive dressing may be left off entirely.

Southern California Hospitals.

The hospitals and sanatoria in the southland are almost constantly expanding and developing. Dr. Pottenger, Chairman of the Committee on Tuberculosis of the State Society, has met with remarkable success in the development of his sanatorium at Monrovia and has had to double its size, the addition being completed only recently. Already it is full and he is, we understand, contemplating still further expansion and equipment. The Good Samaritan Hospital in Los Angeles has recently installed what appears to be as nearly a perfect call system as it is possible to devise, together with many other improvements. The California Hospital, also in Los Angeles, has under way, and now nearly completed, a very considerable addition to its buildings. This new portion is built of brick, like the maternity pavilion, and adds largely to the accommodations of the hospital.

REPORT ON AN EPIDEMIC OF DIPHTHERIA.*

By RAY LYMAN WILBUR, M. D., Stanford University.

IT IS MY aim to present to you in this paper a brief report on forty-three cases of diphtheria that recently came under my observation, and also to outline the methods used to prevent the spread of the disease, particularly by the prophylactic injection of antitoxin. These forty-three cases do not represent all that occurred at the time of the epidemic, but only those actually seen by me either in consultation or as private patients.

In December 1903, and subsequent to that time, particularly during last June and July, several cases of diphtheria occurred in Palo Alto and on the Stanford University campus. Some of these cases were severe and one death resulted, but during the month of August there were no new cases. With the return of the students from their vacation early in September new cases began to appear. The origin of these early cases was obscure and in no one of them could be traced absolutely to a definite source. Some of the infected students reported diphtheria as prevalent in their home towns. In none of the early cases could a history be obtained pointing to contact with any previous diphtheria patient in the neighborhood, or with any apartment formerly occupied by such a patient. Many of the later cases that appeared were evidently from association with the earlier ones. A number of them came from two cases that were left, wrongly diagnosed, in a dormitory for almost a week. The first case of this series came under observation early in September and the last one was discharged the latter part of October.

General Character of the Cases. A majority of these cases were of the pharyngeal type and occurred in young adults although there were eleven children under ten years and two patients over forty years of age among them. While some of them were quite severe, the major portion of them were diagnosed early and were treated promptly by antitoxin so that the throat condition was not serious at any time. Four only of this series had a laryngeal affection; two of these being under three years of age. There were three buccal, one nasal, and one conjunctival infections, and three had post-diphtheritic paralysis or neuritic symptoms of some sort. None of the laryngeal cases required intubation although only the use of large doses of antitoxin promptly given and frequently repeated saved two of them from laryngeal occlusion. There were no deaths among the patients in this series and all but one were treated with diphtheria antitoxin. This one case was seen about four weeks after the appearance of the membrane for paralysis of the soft palate and a right hemiplegia, and the patient had been treated by a druggist by the use of gargles. The clinical diagnosis of most of the cases was easy. They usually began with headache, malaise, marked pain on swallowing, temperature up to a hundred and two degrees or a hundred and three degrees rapidly sinking to subnormal. Usually the throat had a purplish congested look, and the anterior cervical glands were swollen and tender. The membrane in the beginning was ordinarily of a greyish white color confined to the tonsils and adherent, its base bleeding readily when the membrane was disturbed. As a rule this spread rapidly to the soft palate. The uvula when involved usually became adherent to one of the tonsils.

It was found of great importance to carefully examine all throats with the aid of a head mirror and a swab or probe in order to detect a beginning membrane. Frequently small patches were found on the tonsil completely hidden by the anterior pillar, and a diagnosis was made by culture from them in time to prevent a severe involvement of the throat. In one case the patient had been seen by a physician

*Read before the California Academy of Medicine, December, 1904.

a couple of times because of pain in swallowing, headache, etc., and his throat seemed to be clear, but when the soft palate was elevated a membrane was found the size of a five cent piece at the apex of a very long highly-placed tonsil. It was also found of importance to carefully examine the teeth. In two cases where an incoming wisdom-tooth had injured the gum a diphtheritic membrane had formed there, and in another the presence of an alveolar abscess seemed to prolong the tenancy of the Klebs-Loeffler bacilli in the buccal cavity.

Smears made from the membranes of these cases usually showed the presence of typical bacilli, but in no case was a positive diagnosis made before the growth upon blood serum had been examined. In making cultures it was the rule not to use the swab if membrane was present, but to tear off a piece of membrane with a sterile scoop and rub it over the surface of the culture medium. It was usually possible to find plenty of bacilli within fourteen to sixteen hours, although twenty-four hours was sometimes necessary.

Several interesting border-line cases occurred which showed bacilli of various sizes and shapes in smear and culture, and which were characterized by the presence of a whitish non-adherent mucus exudate usually present upon the tonsils only. Cultures from these cases were submitted to bacteriologists with varying results. During the epidemic several of the ordinary staphylococcal tonsillitides and two severe cases of streptococcal infection of the throat came under my observation. In one of the latter a membrane covered both tonsils for thirty-six hours but was readily dissipated by local treatment. In another case diphtheria bacilli were found along with large numbers of oidium bodies. After the use of antitoxin the Klebs-Loeffler bacilli disappeared, but the scattered adherent patches persisted on the tonsils and the posterior wall of the pharynx. Cultures made from them showed numbers of oidium bodies two months after the throat was first seen. Cultures from this case were submitted to Dr. H. R. Oliver, and were thought by him to correspond to organisms described by him as the cause of a chronic membrane in the throat.*

This case shows the advisability of making frequent cultures from throats where a membrane persists after the use of antitoxin.

In another case a smear made from a throat which had some patchy exudate upon the tonsils and a small but adherent patch upon the uvula showed bacilli resembling the Klebs-Loeffler bacilli. A culture was taken and simple gargle ordered and a thousand units of antitoxin given. The culture was positive, but when I returned twenty-four hours later to report the result to the patient, the exudate had completely disappeared from the throat and the second culture was negative.

Temperature. In only a few cases did the attack manifest itself with high temperature. In these numerous streptococcal were found mixed in with the Klebs-Loeffler bacilli. The presence of a temperature of over 103° was usually associated with a staphylococcal or a streptococcal infection and the presence of sustained temperature spoke against the diagnosis of diphtheria. Between 100° and 101° was the commonest elevation noticed and this usually sank within three days after antitoxin was given, to subnormal. About two-thirds of the patients had a subnormal temperature for five or ten days and frequently complained of having cold extremities and being chilly. In three cases the temperature went as low as 96° each morning for several days.

Circulation. Very few of the patients in this series of cases escaped some abnormal changes in the heart rate or action. About one-third had a pulse rate of from 40 to 60 from the fourth day to the fourteenth. This was frequently followed by a period of rapid pulse rate 100 or over with an evening rise of

temperature to 99.6° to 100°. Five patients were found with murmurs or developed them during convalescence. Circulatory collapses occurred in two patients and were repeated twice in the same patient. They came on in the third week, were sudden and somewhat alarming, and were accompanied in each case by a sudden nausea, great weakness, pains in the joints with the prompt appearance of a very severe urticarial rash, amounting in one case to an acute edema of the back and sides of the trunk.

Nervous Disturbances. Headaches and sleeplessness were the commonest nervous symptoms. One case of post-diphtheritic paralysis has been alluded to. Two other cases of paralysis of the palate in improperly treated patients were reported to me by other physicians. One patient in my series had an attack of herpes zoster five weeks subsequent to the diphtheritic infection and another had tingling and some anesthesia with slight failure of co-ordination in both arms six weeks subsequent to infection.

Albuminuria. Albumin was found in the urine of one-fourth of the patients and was usually accompanied by hyaline tests; in those followed up, it disappeared within four weeks.

Rash. In three other patients besides those previously mentioned a severe rash appeared usually about sixteen days from the onset of the illness. The trunk and limbs were most affected. Accompanying the appearance of the rash there was a rise in temperature, frequently pain in the joints, itching and burning of the skin, and marked nervousness. Within thirty-six hours the rash usually disappeared, often to return again transiently for a few hours.

Special Cases. The case of conjunctival diphtheria is perhaps worthy of special mention. The patient had an area the size of a dime on the lower outer tarsal conjunctiva of the right eye. It did not involve the eye-ball and attracted the patient's attention more because the lymph glands in front of the ear and along the neck became suddenly swollen and painful. He had the feeling that something was in the eye and the lower canthus was drawn down and the lower lid slightly averted. His temperature was below 100° and except for a general feeling of malaise, headache, and lack of appetite he complained of nothing. The throat was at first clear, but later some small patches of membrane developed upon the tonsils. The patch on the conjunctiva had a soft base, was irregular in outline, light grey in color, slightly elevated and with well-defined edges. A culture made from a piece of detached membrane showed a pure culture of bacilli, presenting microscopically all of the morphological features of the Klebs-Loeffler bacilli. No animal experiments were made. Antitoxin was promptly given and for a short time there was no local treatment in order to test the therapeutic effect of the antitoxin. After the first injection the progress of the infection was stayed and after 12,000 units had been given the patch gradually shrunk somewhat and the glandular swelling became smaller and less painful. Ice and ichthyol ointment were applied over the glands and later boric acid solution and calomel powder were used in the eye. The patient ran a very irregular temperature. Within a few days from the beginning some discharge appeared in the conjunctival sac and cultures showed staphylococci present. No Klebs-Loeffler bacilli were found at the end of three weeks; the patches disappeared from the throat soon after and the patient was discharged at the end of a month, although the glands were still somewhat enlarged. It was feared at first that the lesion was a chancre, but the prompt reaction to antitoxin and the progress of the case seemed to make a diagnosis of diphtheria clear.

Treatment. With one exception all the above patients had from 4000 to 36,000 units of diphtheria antitoxin. An effort was made to administer this as promptly as possible after the case came under observation. When there was a suspicious appearance of

* *California State Journal of Medicine*, August, 1904, page 240.

throat, 1000 units were given. If the clinical appearance pointed strongly toward diphtheria, 4000 were given at the time the first culture was taken. The results from the use of antitoxin were most satisfactory. Within twelve hours improvement was usually evident. The throat became less painful, the glands less tender, the membrane began to shrivel slightly and to loosen at the edges. If the membrane did not promptly separate the antitoxin was repeated within six or eight hours. The laryngeal cases were given 4000 units every four to eight hours until improvement was noted. No attempt was made to use a minimal dose but the antitoxin was used whenever the membrane seemed adherent or inclined to spread. Frequently when small areas lingered on the tonsils three or four thousand units would promptly loosen them. In some cases new membrane formed rapidly over the site of the previous one, and in the nasal case, after a mass the size of a small oyster had become loosened and was removed by forceps from each post nares, membrane formed over the tonsil and required more antitoxin to loosen it.

The value of the antitoxin needs no corroborative testimony from me but the results were frequently so striking as to amaze one. The sense of security, that its use gave the patient, as well as the physician, was of great help in controlling the epidemic. In fact, it worked so well sometimes that it was hard to convince the patients that the diagnosis was correct.

The limitations and value of the use of antitoxin were illustrated in one family where, because of probable exposure to a case in school, one of the children in the family came to me. He complained of some dryness and pain in the throat, but only came to get a prophylactic injection of antitoxin. Upon examination small greyish adherent patches were found on both tonsils which showed Klebs-Loeffler bacilli. A visit to the house showed that the three other children, the father and mother and Japanese cook all had patches on their tonsils. Injections of antitoxin were given to all, varying in amounts and repetition, according to the amount of membrane. All did well from the first except the Japanese, whose membrane extended over both tonsils and the uvula for a couple of days before disappearing. In a few days they were all so well that some of the family became skeptical of the diagnosis, but the youngest child, who had received only 2000 units and who, except for one small persistent patch on the tonsil, was apparently well, two weeks later ran around the cold floor with bare feet for an hour or so. Immediately the throat became very painful and a membrane involving the whole pharynx developed and was only controlled by 24,000 units of antitoxin.

Besides the antitoxin the principal treatment was in the use of proper diet, the procuring of rest, the frequent use of simple alkaline gargles, and the application of various external agents, ice, ichthyol, etc., to the neck to relieve the pain of swallowing or to prevent edema in some of the severer cases.

Diet. An effort was made to give each patient nourishing simple food that could be easily swallowed, and for ten days light diet was the rule. If during that time albumin was found in the urine, milk was made the basis of the nourishment.

Rest. I was particularly impressed with the desirability of having as near absolute rest as possible, even in the mildest cases, especially as long as any exudate lingered in the throat. Afterwards even before the throat was bacteriologically clean, unless the pulse was too slow or too irritable, a certain amount of fresh air and moderate exercise seemed most beneficial.

Gargles and Sprays. Strong antiseptic solutions were not found to be of benefit except in cases where the lacunae of the tonsils continued to fill with an exudate rich in diphtheria bacilli. Here, tincture of ferri chlor in glycerin aa was found useful. Dobell's solution or some other alkaline gargle, frequently repeated, gave the patient comfort and seemed to do

as much good as any other form of local treatment tried. When a rash occurred it was usually promptly relieved by thorough purging, and the use of alkaline washes or carbolic acid in a solution of magnesia applied locally.

Recovery. Recovery in even some of the mild cases was quite prolonged and for two months after the onset most of the patients reported themselves as still feeling the effects of the disease in lessened energy, more frequent headaches, etc. Still, two of the men who had extensive membrane formation with marked systemic symptoms recovered rapidly enough so that by careful training they were able to play in an intercollegiate football game within a month after leaving the hospital, and they suffered no ill effects therefrom.

Rash. The question as to the antitoxin as a cause of heart failure, albuminuria, nervous symptoms, etc., need not be gone into here, but as the causative factor in the appearance of the rash a word might be added. In the diphtheria cases the rash sometimes came where fairly considerable amounts of antitoxin had been given, and seemed prone to come where the membrane had been resistant to the antitoxin and suddenly loosened, leaving perhaps a considerable amount of surplus antitoxin in the blood. Among the individuals given prophylactic doses I saw only three cases of urticaria. This was in one case, my own, purely local and limited to the sight of the injection, and, while accompanied by severe itching and burning, only lasted a couple of days, but recurred upon subsequent injection. I saw four cases of general urticaria, probably gastrointestinal in origin, in patients, who had neither diphtheria nor antitoxin during the time that the diphtheria was prevalent. Some cases of rash with diphtheria where no antitoxin was given have recently been reported, and I reported to this society several years ago a short series of cases of follicular tonsillitis accompanied by rashes similar to those seen during the present epidemic. I am inclined to believe that the diphtheria antitoxin gets the credit at times for eruptions upon the skin caused by the absorption of toxin from a mixed infection of the throat or due to digestive disturbances.

General Plan of Control of the Cases. In getting control of the present epidemic the plan of procedure was to consider all cases of throat infection, no matter how mild, diphtheria until cultures had proved them otherwise. The suspected patient was kept by himself in his room until the diagnosis was made. When the diagnosis had been made the patient was either quarantined where he lived or sent to a hospital arranged for such cases. All directly exposed individuals, and by this was meant all those living in the same house, including servants, or those eating at the same table, had their throats examined and had their choice between being quarantined for a week or ten days to see if the disease would develop and receiving a prophylactic dose of antitoxin. The latter alternative was invariably chosen, although a couple of days of quarantine was sometimes needed to bring about a proper appreciation of the value of antitoxin. Where one or two cases had been found in a fraternity house or a club, injections were given to all and they were all instructed to use an antiseptic gargle. All of the dishes were boiled in soda solution. The rooms of the diphtheria patient were shut up and promptly fumigated with formaldehyd. In five instances at least eighteen or twenty people had been in direct contact with the diphtheria patient and yet in none of them did diphtheria develop after antitoxin was given. In all I have a record of 287 prophylactic injections of antitoxin. By far the greater part of these were given to those directly exposed to the disease although in a few families it was given as a precautionary measure. Its value was very great. At first a few injections of 500 units were given, but in one boy, two weeks following an injection of that amount, a small membrane developed, so that a dose

of 1000 was made the rule. Not a single one of this series of 287 developed diphtheria except as just noticed. As two weeks is considered as the early limit of the prophylactic effect of the antitoxin, the percentage of cases of diphtheria occurring in this series of prophylactic injections is practically nil. The nurses who cared for these patients were advised strongly to take antitoxin. Two did not until a membrane began to develop in their throats, but by the prompt use of antitoxin they were soon able to go on with their work.

Certainly we have in the prophylactic use of antitoxin a most efficient means of controlling diphtheria epidemics. With the small volume of serum now needed to give 1000 units of antitoxin it is a very simple thing to administer. I found the loose tissue under the left shoulder blade, the best place for the injection as the process could not be seen by the patient and caused very little pain. Occasionally there was numbness and tingling in the arm upon injection, but it soon disappeared. Muscular exertion soon after the injection was often painful and left considerable soreness. This was noticeable in cases I saw that had been injected in the arm or leg. There was an occasional complaint of headache or dullness and frequently the parents reported that a child had slept at an unusual hour or unusually long following the administration of the antitoxin. In two cases a sharp local reaction followed the injection of curative doses and caused great swelling and pain. A free purgative with the application of local moist heat soon brought things to normal.

Disinfection. The rooms of diphtheria patients were carefully treated with formaldehyd vapor. As ordinarily used it did not seem very effective and someone even reported a live fly in a room after the formalin fumigation was over, but when combined with steam in the generator or when water is allowed to boil in the room while the formalin is being evaporated it is, especially when used with the formalin spray, I think, the best means we have of fumigation in private houses. The duration of the quarantine of these cases varied from one week to four. Patients with large tonsils full of crypts retained the bacilli in them and the throat longer than others. The first sign of the disappearance of the bacilli was usually a marked anemia of the throat. All patients were held until two successive negative cultures taken twenty-four hours apart were obtained. If any exudate was present on the tonsil the culture was made directly from it. The greatest difficulty experienced was in keeping the patients contented in quarantine after they felt well and the throat seemed clear. No method of gargling, etc., tried seemed more effective than another in hastening the disappearance of the bacilli. Occasionally an injection of antitoxin even when the throat was free from membrane seemed to shorten the clearing up of the bacilli from the throat.

Looking back over the epidemic and considering the number of cases seen in about six weeks time, and the opportunities offered by the dormitory and club house for the spread of the disease it is certainly gratifying to record that no new cases have appeared for about two and a half months. I take it that this shows the value of strict quarantine and the free use of prophylactic injections of antitoxin in controlling diphtheria.

When you move, do not forget to send your change of address to the office of the Society immediately.

POST-OPERATIVE VENTRAL HERNIA—ITS CAUSES AND PREVENTION.*

By C. GEO. BULL, M. D., Alameda.

THAT hernia of the abdominal wall may follow celiotomy is too well known to require more than a bare statement. Its frequency varying from 1% in clean cases to between 20% and 25% in septic cases is very suggestive. Let us first, however, examine into its more frequent causes and we shall then be in a better position to determine how to prevent it.

The main causes are briefly as follows:

Drainage; a relatively long incision; wounds healing by granulation; failure to bring fasciæ into proper apposition, resulting from method of suture, tension of fascia, direction of incision, etc.; division of nerve supply to the muscles of the abdominal wall, usually more frequent in section for operations on the biliary tract, by reason of the oft times unavoidably long incision and consequent destruction of motor terminals of the intercostal nerves, though hernia above the umbilicus is somewhat rare; vomiting or straining from any cause and abdominal tension from flatus may provoke hernia if occurring before the wound is firmly united; and finally, according to Kelly, patients rapidly accumulating adipose tissue after operations, thus increasing intra-abdominal pressure.

Drainage. Hernia appearing in the scar was undoubtedly more frequent when drainage was the rule and I think surgeons are pretty well agreed that more hernias occur after drainage in abdominal operations than after sections that are not drained. The reason is obvious, inasmuch as we obtain imperfect fascial and muscle approximation at the site of the drain and often a poor quality of granulation tissue. "The frequency of hernia after operation for appendicitis with abscess," says Deaver, "is a strong argument for early operation." This brings up the question of whether to drain or not. Not long ago, drainage was customary, especially if the slightest doubt was entertained as to its propriety. Now, the reverse obtains and, of the many abdominal operations I witnessed both in the East and in Europe last summer, I recall but two in which drainage was used. We know that the peritoneum can dispose of septic fluids as well as even fair sized septic masses if its vitality be intact and this ability of the peritoneum, or its resistance to infection, is much more marked in some individuals than in others.

Dr. Stillman† of San Francisco, made the assertion, in a paper read before the State Society at Santa Barbara two years ago, that more cases of septic peritonitis recover without drainage than with it. Of course, this excludes pus cases. Pus in the abdomen must be evacuated and drained just as it is elsewhere. Olshausen, of Berlin, at whose clinic I spent some time last year, teaches that the peritoneum as a whole can not be drained, but will drain itself toward the diaphragm if unmolested, always providing the toxic condition be not too virulent, so as to destroy its function. Rather than drain an acute, advancing peritonitis and thus nullify by interference what little resistance to sepsis it still had, I would wait till its violence began to subside, unless there were pus present or perforation. If then, we drain only in pus cases—and many of these do not need drainage if the abscess is localized and can be thoroughly wiped out; e. g., the pus about a ruptured appendix or tube prevented, by limiting adhesions and by gauze introduced for the purpose, from soiling the peritoneum—we will correspondingly diminish our hernia possibilities. If drainage is used, however, it is a safer proposition to suture the fascia at the site of the drain after its removal. This should be especially insisted on if the drainage has been prolonged, the liability to hernia being thereby rendered greater.

*Read before the Alameda County Medical Society, January, 1905.

† *California State Journal of Medicine*, Volume 1, page 334.

Length of incision is a very important factor, particularly if it necessitates cutting muscular tissue crosswise and fascia irregularly, though most of the incisions I saw abroad were much longer than those in this country. Length of incision has special influence in biliary operations, where the firm attachment of fascia to the costal cartilages makes it very difficult to get good approximation, and also in its liability to cause cutting of nerve filaments. The difficulty of properly approximating fascia is markedly noticeable in an incision begun as a McBurney (or gridiron) for appendectomy and then enlarged. This is sometimes a necessity, by reason of finding extensive adhesions, pus, gangrene of the cecum entailing resection, etc., which were not suspected before opening the abdomen. In these cases, of course, if the condition is known, it is better to make an incision near the outer border of the rectus. Then accurate closure of the tissues of the wound after drainage is not so uncertain.

Wounds healing by granulation and particularly infected wounds rarely unite fascia to fascia accurately and it is, therefore, wise in these cases to suture the fascia after danger of infection is over. Infected wounds may follow drainage; infection within the peritoneum, as from a ligature, imperfect hemostasis causing accumulation of blood in the wound; or the suture material used—even a stitch hole abscess or one from pressure necrosis from tight suturing frequently preventing primary union in part of the wound. Primary union, then, throughout the whole of the wound is an important factor in the prevention of hernia and such union is most likely to occur when there is no infection, no blood clot, the sutures are not too tight and the patient is in fairly good condition.

Failure to bring fascia accurately together often occurs in stitching up the abdominal wall and when it does, is of course, a most fertile source of hernia. Kelly says, "On the fascia over the recti, the whole strength of the lower abdomen depends," and the same is true of the fascia over the obliques and the transversalis in great measure, as one is continuous with the other. We are often hampered in our efforts to approximate fascia by muscular tension, and in such cases we may sometimes succeed by separating the muscular fibres from the fascia for some distance.

Division of motor filaments of nerves needs some mention. It can usually be avoided, in part at least, by making the incision parallel to the nerve fibres if possible. Where it can not be entirely prevented the number of filaments cut may be reduced. For instance, in operations on the gall bladder and bile ducts, if an incision be made through the rectus from a little below the eighth costal cartilage to the umbilicus, sufficient room will be gained and only the ninth intercostal nerve will be divided. Sometimes division of nerves is unavoidable; it is well, however, to bear in mind the possible weakening of support of the abdominal wall resulting therefrom.

The probability of this contingency and the difficulty of approximating the fascia made tense by firm attachment to the ribs and costal cartilages are the chief reasons for hernia occurring after operations on the biliary tract through the usual incisions.

Tympanites is to be prevented by thorough cathartics and dieting before operation and the use of proper evacuants within a reasonable time after operation, say twenty-four to forty-eight hours.

Vomiting may usually be prevented by careful preparation before operation and keeping the stomach empty for some time afterwards, gastric lavage being often very useful. Strain from sneezing or cough may be largely prevented by the use of broad adhesive straps.

The means of preventing rapid increase of flesh after laparotomy are obvious. A supporter may be of service.

Make incisions as small as compatible with the ability to complete the operation in a reasonable time.

Split instead of cutting muscles transversely or diagonally. Split the rectus at its outer or inner border instead of going through the linea semilunaris or linea alba.

Drain only when absolutely necessary and then use a small drain, closing the rest of the wound carefully. As soon as the drain is removed and any danger of infection is past, stitch the fascia that is not united.

Close incisions layer by layer and bring like tissues into careful apposition, particularly fascia, with some fairly durable material and do not tie the sutures too tightly.

My preference is for a formalinized-gut continuous suture for each layer, or plain gut for the peritoneum with chromicized gut for the rest, which will hold for some weeks if properly prepared. Czerny, of Heidelberg, told me he was using celluloid silk. But, whatever material is used, it should hold at least three weeks. While speaking of durability, I might state here the experience of a well-known surgeon who, having used the through and through method of suturing, finding union apparently complete, removed the stitches on the eighth day, when the patient suddenly sneezed and the bowels protruded through the abdominal wall; showing union is none too firm at that time.

The advocates of through and through sutures state that layer suturing is apt to leave so-called dead spaces which allow collections of blood and serum, retarding union, if not preventing it, and sometimes giving rise to abscess. This is easily avoided by stopping all oozing before suturing and by occasional catching up of a portion of the tissue at the bottom of the wound as the next layer above is being sutured. I am informed, however, that hernias are rare at the Alameda County Infirmary where through and through suturing is the rule. It seems to me that this method can not be relied on to properly approximate like tissues, and, consequently, is not certain to unite fascia with fascia throughout the length of the incision, and the strength of the wound depends almost entirely on good fascial union.

Tympanites should be avoided, vomiting and strain prevented. Reliance is not to be placed on abdominal supporters, but, in my judgment, it is very important to keep patients in bed for from three to four weeks after operation (this in a clean case, healing by primary union), as the union is not strong enough before this to stand much strain. For a number of years past I have endeavored, as far as practicable, to carry out these plans of procedure and have been gratified at not being able to trace any hernias resulting from my operative work.

An analysis of these later operations—which, though modest in number, are somewhat varied—with reference to hernia is herewith appended.

There were twenty-six appendectomies; twelve ovariectomies, including cysts, pus tubes, etc.; two operations for ectopic pregnancy; three ventro-suspensions for recto-flexion; four hysterectomies; four Bassini operations for radical cure of hernia.

Of course, these operations were all abdominal. Of the appendectomies fourteen were in females, twelve in males. The incisions varied in length from $1\frac{1}{4}$ inches to 3 inches according to the nature of the case, thirteen were done by the gridiron method of McBurney; two begun as McBurney's had to be enlarged; three were by incision in direction of the fibres of the external oblique, between Poupart's ligament and McBurney's point on account of the situation of pus; eight were by incision at the right border of the rectus, cutting its sheath transversely and pulling the muscle inward, after the method of Weir; four were drained; two had fecal fistulae; three had stitch abscesses. Of the other operations

nineteen were done through a split rectus muscle and six through the oblique. The length of the incisions was from 1½ to 4 inches. Three had stitch abscesses; one was drained. I have included no operations done later than a year ago.

I wish here to express my indebtedness to a number of surgeons for kindly answering inquiries germane to this paper.

THE ETIOLOGY OF LOCOMOTOR ATAXIA.*

By J. O. HIRSCHFELDER, M. D., San Francisco.

OF ALL the nervous diseases, one of the most frequent and most interesting is *tabes dorsalis*. Its etiology, through the observations of Fournier and Erb, has been made so clear that few to-day will doubt its relation to syphilis. Large statistics, as well as careful investigations of individual observers, have proven conclusively that only a small percentage of cases is found in which previous syphilis cannot be demonstrated. When we bear in mind how often syphilitic infection is denied in cases of well-marked lues of the skin and other organs in which the cause is written upon the body in such plain letters that "he who runs may read," we will not be surprised that in a certain proportion of the cases of locomotor ataxia, lues cannot be proven.

In his latest pronouncement upon the subject, Erb has presented statistics of 1,100 cases observed by himself in which the question of previous syphilis has been most carefully considered. He finds lues to have preceded in 89½ per cent of the cases, whereas among 10,000 diseased individuals not affected with *tabes*, only 21.5 per cent of syphilis could be found.

His results are confirmed by observers in other lands:

Fournier in France found 93 per cent.
Collins of New York, 80 per cent.
Dana, 68 per cent.
Byron Bramwell in Edinburgh, 76 per cent.
Anfimow in Russia, 83 per cent.
Sarbo in Budapest, 86.6 per cent.

A collection of 6,000 cases collated from various authors gave over 80% of syphilis.

My very limited experience corresponds with these observations. Among 54 cases of locomotor ataxia observed at the Cooper Medical College Clinic, 35 had undoubted syphilis. With 5 the subject was not mentioned, whereas 2 were doubtful, and only 12 specifically denied previous lues. Among these, many, no doubt, either overlooked the previous infection or willfully prevaricated. However, leaving all of the doubtful cases entirely out of consideration, the 70% with whom syphilis had been observed speak loudly enough for the validity of the observations of others. It may be safely stated that nearly all unprejudiced clinicians of large experience to-day look upon syphilis as the only positive proven etiological factor in locomotor ataxia. A large number of other causes have been assigned to the disease, but the evidence upon which these assumptions have been made is not sufficiently great to bear critical scrutiny.

Dr. Collins, of New York, has presented his conclusions, drawn from a most careful analysis of 140 cases observed by him. He is unable to find any positive evidence pointing to any of the usually assigned causes of locomotor ataxia, such as sexual excesses, alcoholism, trauma, exposure to wet and cold, or worry, having any causal relation to the disease in the absence of syphilis. The acceptance of these deleterious influences as causes of *tabes* is merely another illustration of the tendency to receive statements without due and critical investigation.

However strong the clinicians may plead for the luetic origin of locomotor ataxia, there is great difficulty in persuading the pathologists of the truth of that doctrine. Virchow has always assumed an an-

tagonistic position, and his teachings have been accepted by the large majority of pathologists. They are absolutely unable to find any indication of luetic origin in the far larger proportion of cases that come to autopsy. A small number of individuals who during life had shown the clinical symptoms of the disease, upon autopsy are found to have the gummous infiltration of the cord that is characteristic of syphilis, but these findings are quite rare. In the ordinary cases nothing can be found other than the usual sign of gray degeneration with increase of the neuroglia, such as will be found in any case of chronic myelitis.

Lately, however, Lesser has called attention to some facts which had been overlooked heretofore, and which may throw some light into this dark field. Lesser assumes that in addition to the secondary and tertiary forms of syphilis with which we are familiar, a quartan form may be recognized which manifests itself in interstitial infiltration in various organs attended with secondary parenchymatous degeneration. He finds these signs of quartan syphilis in most cadavers of luetic individuals, usually in the form of interstitial infiltrations in kidneys, livers and testicles. In these organs where the lesion is not extensive, the trouble is not recognized during life, as the function of the lost tissue is well compensated for by the healthy structure remaining. He calls especial attention to the syphilitic lobulated liver, to the syphilitic fibrous orchitis and to the smooth atrophy of the base of the tongue, the syphilitic character of which was pointed out by Virchow in 1860. In the latter disease we have an interstitial degeneration which is attended with a secondary degeneration of the glands at the root of the tongue.

In a similar manner Lesser believes that in the presumed quartan form of syphilis an interstitial myelitis develops with secondary degeneration of the axis cylinders of the cord, producing *tabes*. That the degeneration should be localized in the posterior columns seems no more strange to him than that the degeneration of the tongue should always be localized at the root only, or that the special form of orchitis fibrosa, which he considers quartan syphilis, should be restricted to the vicinity of the hilum. He likewise calls attention to the great frequency with which locomotor ataxia is associated with aneurism, a disease whose relation to syphilis is well recognized. Among 96 cases of *tabes* observed in the Moabit and Urban Hospitals of Berlin reported by Lesser, 18 were likewise affected with aneurism. Like all of these forms which Lesser considers quartan syphilis, *tabes* also appears many years after the primary affection, and shares with that disease the peculiarity of not being amenable to anti-syphilitic treatment.

A further confirmation of the syphilitic origin of *tabes* has lately been afforded by the cytological examination of the cerebro-spinal fluid removed by lumbar puncture. Attention was first called to this subject by Vidal, who claims to have shown that in *tabes* and all other forms of syphilis of the cerebro-spinal tract, a marked increase of the mono-nuclear lymphocytes can be found. His observations have been quite generally confirmed.

It is unfortunate that we cannot, as a rule, prove the luetic character of *tabes dorsalis* by cure of the patient with anti-syphilitic remedies. It is true that a certain number of patients respond beautifully to that treatment. Everyone who has seen and treated many cases will occasionally have been gratified by the results, but in the larger number of instances neither mercury nor iodid will bring about any improvement. Yes, on the contrary, with many there is a distinct and well-marked increase of the trouble. This resistance to anti-syphilitics we have learned from Lesser is peculiar to all of the quartan forms of syphilis. The frequent occurrence of the paralyses of the oculomotor nerves and of the optic has always

*Read by title at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April, 1904.

been a stumbling-block in the way of all explanations of the histogenesis of locomotor ataxia. The frequency with which oculomotor paralyses occur in syphilis not attended by tabes seems to confirm the luetic theory.

In 1894 Edinger, of Frankfort, proposed a theory on the etiology of nervous diseases, and especially of tabes, which should not be disregarded. This theory is based upon the fundamental proposition that the molecules of a cell are in a state of labile equilibrium such that if one part becomes enfeebled, it is overthrown and strangled by its neighbors. In a similar manner components of tissues are hypertrophied at the expense of enfeebled constituents. When a cell performs its functions normally, its contents are destroyed, but are immediately replaced in the regeneration which occurs. If the cell be overexerted or enfeebled by toxins or other poisons, the connective tissue luxuriates, and we have an interstitial hypertrophy resulting. There is no question that in the normal performance of function, substances are destroyed which must be replaced. The difference in histological appearance and in reaction to stains between cells that have performed their function and those which have rested has been clearly demonstrated by Daschkiewicz, Hodges and Nissl.

Edinger presupposes an increased vulnerability of the spinal cord through the influence of syphilis, possibly through a toxin. He calls attention to the fact that of all nerves of the body, those which rule over the maintenance of the equilibrium are the most frequently called into action, and are those which suffer the greatest wear and tear in the ordinary functions of life. It is just these organs of coordination which are injured the soonest and the most severely in locomotor ataxia. Edinger ascribes this fact to his theory of diminished recuperation. According to him, the first thing that occurs in the luetic individual who is about to become tabetic is a diminished recuperation of the system of nervous elements that bring about coordination. In consequence thereof, the uninjured neuroglia tissue luxuriates, and a sclerosis results.

In the spinal cord, when an injury occurs at any one point, secondary degeneration of the whole system to which that part belongs results, and as a consequence we have the anatomical changes characteristic of tabes. This explanation renders it clear why tabes nearly always begins in the lower extremities and arises so frequently in those who exert the lower extremities to a great extent.

A careful examination of the mode of life of those who become affected with high tabes arising first in the upper extremities may lead to its explanation by this theory.

In a similar manner, Edinger explains the peculiar action of the pupils in locomotor ataxia. The pupils are normally constantly undergoing changes due to varying degrees of light, and the nervous elements involved in the reflex act are subject to constant strain. Through the diminished recuperative power, he presupposes the disturbance that we recognize as the Argyle-Robinson pupil results. Of the muscles around the eyeball, the levator palpebræ, the abducens and the rectus internus are the ones most frequently called into action, and as would be demanded by Edinger's theory, these are the ones most frequently involved in tabes.

It is by no means improbable that the atrophy of the optic nerve may be explained in a similar manner, and it will be of interest to determine to what extent eye-strain forms its etiological factor in the cases of locomotor ataxia in which it occurs.

ACUTE DELIRIUM.*

By H. E. SANDERSON, M. D., Stockton.

THE closeness with which this affection is allied to the distinctly somatic affections met with in general practice, and the shortness of its course with lethal outcome, render it of more than passing interest to the profession at large, and entitle it to your earnest consideration at this time. When you remember that in the cases I am about to describe the patients were sent to us from considerable distances by rail, and in some cases from general hospitals, to die within a few days after admission, necessity of bearing in mind the existence and leading characteristics of the disease will be evident.

Status and Etiology. The present status of acute delirium is a much disputed point amongst alienists. It was recognized by the ancients who termed it phrenitis. In 1884, Luther Bell described it under the name of typhomania, since which time it has also been commonly called "Bell's Disease." Spitzka, in 1883, first used the term delirium grave. Other writers have failed to mention it as a clinical entity until recent times, and even now much confusion is caused by trying to place all cases manifesting delirium in the same category.

Coming down to the present time, we find a great diversity of views amongst writers. Clouston speaks of it as a phase of severe primary mania, and calls it delirious mania. He terms it "a further stage of acute mania," and takes issue with other authors in their prognosis of the affection. Kraepelin calls it a "symptom complex" and not an independent disease. He views it as a pathological condition developing in the course of various psychoses—especially dementia paralytica, mania, acute alcoholism, and active melancholia. He terms it an irritative brain lesion of sudden development soon passing into paralysis. But, while maintaining that similar symptoms may follow in the wake of pneumonia, myocarditis, and septicemia, he admits that it may occur as a primary brain lesion. The majority of French psychiatrists, de Boismonet, Ball, Brand and others, look on acute delirium as being an individual disease. Mendel, Furstner, Meynert, Schuele and Alzheimer regard it as a symptom complex. Dr. Soukanhoff is of the opinion that acute idiopathic delirium is by its evolution and course nearer in semblance to an infectious disease than to anything else. The same opinion was held by Briand, Bianchi, Puncinnino, and Rosari. Berkeley thinks it a matter of doubt as to whether it should be considered an entity or only a symptom complex. He says "in the few cases it has been my fortune to see, some diagnosis other than delirium acutum—principally post febrile or meningitic delirium—would have been equally justifiable," and cites the fact that similar symptoms occur after a host of infectious troubles—especially pneumonia, typhoid, typhus, phthisis, dysentery, measles, acute rheumatism, influenza, the puerperal state, and gastric cancer.

Kellogg regards it as a distinct form of mental disease, and says the term should be limited to those independent acute delirious manias which present the typhoid symptoms and run the hyperacute course described. He speaks of suppurative kidney and pulmonary disease, and surgical operations accompanied by prolonged anesthesia as causative factors while some cases can only be accounted for on the theory of perverted metabolism and auto-toxemia. Kraft-Ebing considers it a distinct affection due to "certain injurious circumstances acting upon the brain, primarily through the vasomotor nervous system, causing hyperemia, through paralysis of the vessel walls." He mentions long-continued hard struggle for existence as a common factor, though in a large majority of cases the patients are predisposed to nervous troubles and excessive vasomotor irritability. Schuele

Sanitation of Railway Cars in Kentucky was instituted in the latter part of 1904, and after some little trouble from the railway companies, the State Board of Health succeeded in enforcing its regulations. The supervision extends to cars of all sorts.

* Read before the San Joaquin County Medical Society, December, 1904.

has known it to result from excruciating physical suffering. In most cases it was noted that the patient—usually between 20 and 40—who has for a long time been in a feeble state of health, suffering from malnutrition or nervous prostration, (due frequently to poverty or drunkenness) experiences some extra strain on the nervous system. Such a strain might occur from emotional shock, due perhaps to an unhappy love affair, alcoholic excess, business crisis, or the puerperal state, which would precipitate the outbreak of delirium. Abandonment of seduced and pregnant girls is a prominent element in the history of some cases. The recorded cases of "meningitis from overstudy" are in reality instances of acute delirium, and are brought about as much by the emotional strain attendant upon competitive examinations as by the mental effort itself. Other assigned causes are the menopause, insolation and trauma. With such causes, an instability of the central nervous system would be induced; and the presence of an irritating and debilitating poison, whether from within or without, would more easily overturn the mental equilibrium.

Spitzka says: "It is never a strong mind nor a healthy body that suffers in this way, but one inherited from a feeble ancestry, and our school system is not to be blamed for it." Macpherson, while admitting the fact that acute delirium occurs sometimes in predisposed persons as a consequence of profound physical and nervous prostration, and malnutrition, considers that it is the immediate result of bacterial toxins, and places it in the list of "forms of insanity resulting from autointoxication or microbic toxins." A number of investigators have described bacteria found in the urine, blood and other parts of the organism, in cases of acute delirium. Sir John Baly Tuke described a long, rather thick, bacillus with numerous spores found in the urine and blood. Babcoch found in the cerebrospinal fluid prior to death the micrococcus pneumoniae croupose and streptococcus pyogenes aureus, the former in great numbers, the latter in scattered chains. Ceni found in a series of experiments that the blood of the insane suffering from intense motor unrest, and that of animals whose muscular systems had been severely exhausted by the continuous application of faradism, form a favorable culture medium for the growth of bacteria. One must, however, remember that in the blood of the insane generally, the presence of pyogenic organisms has been frequently determined.

Blanchi obtained from the blood of patients with acute delirium a certain organism, having the form of a bacillus, two or three times as long as broad, and with tendency to unite in chains. It was mobile, stained with the ordinary aniline colors and by the Gram method and was non-sporific. He cultivated it in agar and in broth. Various forms of cocci, specially the streptococcus and staphylococcus were also found in large numbers. He regards the bacillus as peculiar to the affection and has found it in autopsies in the subarachnoid and ventricular fluids. Ceni found only staphylococci, and believes the microorganisms found are only of secondary importance.

The various researches on the bacterial origin are seen therefore to be by no means in accord; nor indeed could accord be expected, inasmuch as the inciting sources of the disease are so manifold. Some of the cases described as acute delirium have been either aggravated phases of a primary psychopathy, or the expression of other intoxications. We are warranted in inferring that certain cases are due to inoculation with the toxin productive of primary and genuine acute delirium upon ground already occupied by other psychopathies. We should not include under acute delirium, mere episodes of other mental troubles which somewhat simulate it.

The following cases occurred at the Women's Department of the Stockton State Hospital during my term of service, beginning January, 1895.

L. W. Age 45, widow, keeper of boarding house, American. Admitted March 16, 1895. Family history unknown. Before admission for five days was boisterous, very talkative and violent. Ran away from her home and refused to return. History otherwise unknown. March 18—Nolsey, incessantly talking and incoherent. Refuses food and drink. Has profuse muco-purulent expectoration. Always expectorates on the floor. March 21—Has not changed since the 15th. No rise of temperature; respiration normal; pulse 100, normal in frequency and strength. Physical examination negative. Bowels constipated. Mouth has sordes on tongue, lips and teeth. Is delirious. April 13—Patient has been delirious since last report. Died today. No postmortem allowed.

A. W. Age 20, single, dressmaker, American. Admitted April 29, 1897. Family history unknown. Before admission had previous attacks of insanity; nature not given. Has been insane for two years. Imagined she had a man and a baby in bed with her, and that she was in some strange place, while at home. Has repeatedly threatened suicide. Is said to have been subject to hysterical convulsions. Irrational and incoherent; hallucinations of sight. On admission, is prostrated; tongue dry and coated; sordes on teeth; delirious; slight eruption of acne in places. Physical examination negative. Is noisy at times and picks at the bed clothes. May 1—Is in a stuporous condition. Occasionally screams. No fever. Respiration 30; pulse 90. Physical examination negative. May 3—Lies in a stupor all the time. Screams at times. No apparent hallucinations. Pupils equal and react well. Tongue dry and coated. Cannot be roused. Respiration 46; pulse 100. No rise of temperature over 100 since here. May 4—Looks worse. Temperature 102° F. this morning. May 7—About the same as when last recorded. Temperature has not risen over 101½ since yesterday. Respiration 40; pulse 100. Physical examination negative. In a stupor all the time. Receives considerable stimulants and nourishment. May 9—Patient died. No postmortem permitted.

B. C. Age 28, married, housewife, Austrian. Admitted May 3, 1900. Family history: Father had epilepsy. Before admission, attack began April 30, 1900. Claimed her husband put the children into the fire; also that he sold their little girl of nine years. Imagines the husband wants to kill her and that he is in love with another woman. She jumped out of bed and ran into the street cursing the neighbors. May 4—Was noisy when she first came. Is now irrational, incoherent, excited, violent and frightened. Talks to herself; kicks and bites. Pupils dilated and active. May 5—Looks worse. Has an herpetic eruption on the lips; sordes on the teeth and tongue. Breath foul; pale; pinched face. Temperature reached 103° F. Physical examination negative. May 7—Died.

Postmortem examination. Meninges congested; lymphatic engorgement in the pial vessels with opaque appearance. Pia somewhat adherent to cortex. Brain tissue much congested. Brain swollen, softer than normal, and edematous. Large amount of fluid between pia and brain and in the ventricles. Punctate extravasations in brain substance; light pinkish appearance in cortex. Injection of vessels extends into the spinal cord. Dura mater adherent to skull. Lungs show hypostatic congestion. Heart apparently not affected. Abdominal cavity quite dry; intestines empty and appear much contracted. Other organs somewhat congested.

L. M. Age 38, single, dressmaker, American. Weight, 200 pounds. Admitted May 29, 1901. Family history: One sister was insane. Before admission, destroys her clothing; tried to run out into the hallways of the building where she roomed. Will not talk. Imagined that men were coming and going from her room at all hours and that the house in which she lived was not respectable. Defecated on the floor. Attack began one week ago.

May 30—Is restless; stubborn; moans occasionally. Temperature 101° F. this morning. Pulse 90, full and regular. Quiet; no delirium. Will not talk except occasionally to reply briefly to questions. Lies down and rolls on the floor; refuses food; has to be restrained. June 1—Has temperature 102° F.; pulse 100; respiration 24. Physical examination negative except systolic murmur over mitral and aortic valves. June 2—Condition about the same. Temperature reached 103° F.; pulse 100; respiration 28. Tongue dry and coated; sordes on tongue, lips and teeth. No delirium. Vacant expression. Speaks only a few broken sentences. No hallucinations nor delusions apparent. In a stupor. June 3—Delirious. Temperature 102½; pulse 140; respiration 30. June 4—Temperature 102; pulse 130; respiration 36; stuporous. June 5—Temperature reached 104. Died. No postmortem permitted.

G. P. Age 45, widow, domestic, French. Admitted July 28, 1902. Family history unknown. Before admission, was noisy, turbulent, irrational in speech and actions. Hears voices and imagines that people are after her. Disrobes; threatens suicide; wishes to kiss everyone; pulls her hair.

July 29—Temperature 101° F. Pulse 120 intermittent. July 31—Will not eat. Thinks her food is poisoned. Is violent; frequently attempts to disrobe. Temperature 100° F.; pulse 140. Restless, noisy; talks disconnectedly. August 1—Restless; noisy; sleepless; delirious. Pulse 144; temperature 103½° F. August 2—Condition the same as yesterday; temperature 104° F.; pulse 144. August 3—Temperature 103° F.; pulse 120. August 4. Mind clearer. Talks a good deal. Temperature 101½° F.; pulse 129. August 5—Died 2 A. M.

Postmortem examination. Dura mater adherent to skull over the frontal lobes. Pia mater congested; lymphatics turbid in places. Brain wells out on removing skull; large increase of fluid; brain softer than normal and much congested, showing hemorrhagic points on section and pinkish appearance. Viscera normal except congestion of kidneys. Liver pale. Marked dryness of abdominal cavity. Stomach congested especially at greater curvature.

J. N. Age 26, married, domestic, French. Admitted February 7, 1903. Family history unknown. Before admission, was in one of the leading hospitals of San Francisco for three weeks and sent from there to us. Patient entered there in a delirious state. Temperature 98.4° and pulse 92. On third day temperature was 99° and pulse 100. From then till end of first week temperature was one degree below normal. The second week she appeared well and acted rationally. At beginning of third week, again became delirious and maniacal, with hallucinations of sight and hearing. Beat her head against the bed, when not restrained, and attempted to jump out of a window. Temperature and pulse rate could not be obtained that week because of resistance. At the beginning of the fourth week (February 7, 1903) she was sent to this hospital. On admission here, temperature reached 100; pulse 80, and very weak; respiration 18. Face flushed; pupils widely dilated; lips dry and cracked; teeth covered with sordes; tongue dry and brown. Very restless. Tried to bite the attendants whenever they came near her. Seemed in great fear; resisted everything. Talked incessantly and incoherently, often repeating certain words. Refused food.

February 8—More restless. Makes automatic motions with the hands; has facial twitchings. Becoming more prostrated, and rapidly emaciating. Sleepless. Low muttering delirium. Such was in brief the course of the patient's symptoms during her five days with us. The temperature on February 8th reached 102½° F.; February 9th, 102¼° F.; February 10th, 104° F.; February 11th, 104¼° F., and a few hours before death on the 12th, 106° F. Died February 12th.

The treatment employed was mainly rest, quiet, nourishment, spongings, laxatives, and hypodermics of ergotin. Urine (obtained by catheter) showed small amount of albumen, a few casts, heavy deposits of urates; specific gravity 1025. Physical examination of chest and abdomen were negative.

Postmortem examination. Brain much congested and edematous. Largely increased amount of fluid between meninges and brain, especially collected over frontal lobes, flattening them somewhat. Pia somewhat adherent in places; course of lymphatics marked by white streaks. Sections show scattered hemorrhagic puncta; cortex has light pinkish appearance; congestion of brain extends down into the spinal cord. Rest of the body not examined through lack of permission.

Clinical Delineation. The typical course of the affection is as follows: A preceding history of prolonged mental or physical over-strain, or of alcoholic or sexual excesses. Prodromes of restless anxiety, despondency, forebodings of evil, general malaise, and disturbed sleep. Next, abrupt maniacal explosion, with great violence of motion, incoherence, boisterousness, gesticulations, vivid hallucinations. Then remissions of a few hours may occur. In a day or two, great exhaustion, automatic activity, delirious ideation, obscuring of consciousness, muttering, subsultus tendinum. Temperature rises to 102° F. or even 106°; pulse frequent and feeble; sordes on lips and teeth; tongue dry, brown and heavily coated. Semi-coma; convulsive movements, involuntary rectal and bladder evacuations; rapid emaciation and finally death within fourteen days of the first appearance of maniacal symptoms. Rarely the end may come in thirty-six hours or it may be delayed till the end of the third week.

In cases not resulting fatally, the comatose stage is not reached; the violence abates, and the patient is left exhausted in mind and body. After many weeks recovery may occur, but in one-half of these non-fatal cases, a partial recovery only is obtained, and the patient remains more or less demented.

Differential diagnosis. Concerning the differential diagnosis, it is necessary to distinguish acute delirium from:

1, acute alcoholism; 2, acute meningitis; 3, acute mania; 4, delirium of fevers; 5, paretic dementia.

1. In acute alcoholism, single symptoms may be similar, but the temperature is higher in acute delirium and the reduction of consciousness is more complete. The alcoholic tremor is wanting, though a coarse tremor exists in exceptional cases. When alcoholic excess has been an exciting cause the diffi-

culty is greater. The motor symptoms of acute delirium are more those of cerebral irritation than of a mere psychical disturbance such as occurs in alcoholism.

2. In meningitis there is a very acute beginning, frequently an initial chill; early appearance of sopor, convulsions, stiffness of neck muscles, opisthotonos, general hyperesthesia, and less marked remissions—also may have well-marked paralysis. There are confusion of ideas and delirious excitement in both diseases, but the motor agitation is not so great and the reduction of vital force is not so sudden in meningitis.

3. Maniacal and melancholic frenzy are preceded by the ordinary and readily recognizable symptoms of those psychoses; while acute delirium is either sudden or preceded by a state of impaired consciousness of a kind not found in mania nor melancholia. The ideation is much more incoherent and shows either a frightened or an angry state. Speech rapidly deteriorates and the patient is finally unable to pronounce syllables. In mania there is no considerable rise of temperature nor acceleration of the pulse; and there is loquacity with a ready flow of ideas in place of inhibition or monosyllabic repetition. There is also not the increasing stupor nor hallucinatory-confusional delirium and not the general wasting found in acute delirium. Death in acute mania is rare, while very frequent in acute delirium. Even in the confusional form of acute mania there is not the rise of temperature; while obtundity alternates with prolonged periods of loquacious excitement.

4. Delirium of fevers. In pneumonia the delirium lacks the motor violence and is relieved by antipyretics. The delirium of fevers in general is not of such an intense character and there is a difference in the temperature curve, in some cases a typical rash, together with a sequence in other symptoms unlike that of acute delirium. This is notably the case with typhoid fever.

5. Paretic dementia. In the galloping or so-called fulminating form of paretic dementia, there is a previous history of character changes or changes in mental disposition for months previous. Delusions of wealth and power; erotic ideas; hallucinations of fire and bloody scenes together with a general persecutory delirium, are here present. The temperature seldom rises so high and is more constant. Remissions do not occur with the same regularity in paretic dementia.

Pathology. The pathological processes resemble those of toxic or septic conditions. At first intense congestion of cerebral regions and following the hyperemia, venous stasis with edema. Effusions of blood corpuscles and leukocytes occur in the perivascular spaces, and the ganglionic elements are swollen or in process of disintegration. Sometimes punctate extravasations of blood in the brain substance; lymphatic engorgement; membranes injected and adherent; lungs hypostatic congestion or edema; sometimes lobular pneumonia; heart lax and contains dark fluid blood; muscles soft and pale from fatty or granular degeneration; blood dark and watery; liver, spleen and kidneys engorged; muscles atrophied; micro-organism at times in blood and urine; the hyperemia of the brain may extend to the cord; brain so edematous that it wells out of the skull cavity; cortex appears swollen and dotted with punctiform hemorrhages; the large vessels of the pia appear as white stripes; general muscature granular with wax-like degeneration. On the whole the condition of the brain points to a very low tone in the vessel walls, followed by a hyperemia of the vessels, while the vessels are apt to be varicose and tortuous. The basal ganglia are involved. Local areas of encephalitis exist. Transuded white corpuscles fill the lymph sheaths. Veins and arteries are packed with blood corpuscles. Plastic exudate forms in the spaces. Shrinkage of cells of brain occur and they are pressed upon by pericellular

coagulated exudate. Similar appearances, though less marked, are found after chemical intoxication—psychoses, collapse delirium of fevers, and more rarely after alcoholic delirium. In fact, the whole appearance might be described as that of infectious hemorrhagic encephalitis.

Prognosis. Prognosis is bad. Some few patients recover, but of these a large percentage are incomplete restorations, and show more or less evidence of permanent dementia. Most patients die within two weeks.

Treatment. The treatment is symptomatic. Nothing is of much benefit. Some claim good effects from ergotin injections. The patient should be kept in a large, well-ventilated, darkened, and rather cool room. The temperature of the room should not be over 60°, the patient kept in bed by a restraining sheet, and constipation relieved with croton oil, which also tends toward derivative effect. Reduce temperature by cold sponging or packs. Give as much nourishment as possible, including cool drinks, especially milk. Chloral hydrate should be avoided because of its tendency to induce cerebral hyperemia; and hyosine because of its depressing effect. Morphine may occasionally be needed for allaying excitement. Bromides are useless. Hypnotics are also of no avail. Bleeding and counter irritation are not recommended. Alcoholic stimulants are needed when heart weakness appears. Care must be taken to avoid decubitus.

The number of admissions into the Women's Department of our hospital during the years covered by this investigation, namely from January 1, 1895, to March 1, 1903, was 864. This would make an average of one in 108 admissions. During each of these years, we have had one case of acute dementia, except in 1899, when there were none. In looking over the statistics of a number of the hospitals for the insane elsewhere, I find such a variation in the reported proportion of cases of acute delirium, that I am forced to the conclusion that the statistics have depended very largely upon the diagnostic acumen of the compilers.

Of fifteen typical cases described by A. S. Rowley of the Northern Michigan Asylum, in the *American Journal of Insanity*, six had insane relatives, and only three were known to have none such. Only two had no previous history of insanity. One had had epilepsy for twenty-three years. Only one appeared well nourished. Of the fifteen, only three survived. In reviewing our cases we find one almost the counterpart of each of the others, both as to symptoms, duration, termination and postmortem findings, when such could be made. Cases have been reported by others, in which no physical indications of a definite somatic disease during life, the necropsy showed deep-seated lobar pneumonia, in addition to the hyperemia, lymphatic engorgement and edema of the brain and meninges; so that such a possibility is not excluded in cases not followed by a careful necropsy, though it is decidedly exceptional.

SUPPORT THE BOARD OF EXAMINERS.

"These facts show why it is the doctor's duty to the state to support the medical examining boards, to work to have honest men appointed upon them, and not to be too censorious of their shortcomings. We, who have not served on these boards, know little of the worry, the work, and the weariness entailed by honest service in them. The man, who unreasonably or unjustly decries the system and its exponents, is doing an economic wrong similar to that of those few honorable but short-sighted doctors, who for years played into the hands of the profession's enemies by opposing state control of medical licensure. The manner, in which state laws compelled low-grade medical colleges to adopt entrance examinations, lengthen terms, and exact efficient final examinations, has fully justified the prophecies of the advocates of state control."—John B. Roberts, Philadelphia.

COMMUNICATIONS.

AN APPEAL TO THE GENERAL PRACTITIONER.

To the Editor of the STATE JOURNAL: Perhaps when you were a school-boy and less venerable in appearance than at this present date, you occasionally heard some of your companions spouting on "declamation day," the familiar lines: "Why is the forum cr-r-owded? What means this stir-r-r-in Rome?" If so, you may be interested in another "stir" now agitating the camp of the California opticians.

Some two years ago certain of the grinding folk got a bill through the Legislature establishing a board of examiners in "Optometry" (sic). When it came into the hands of our present governor, he, it is said, signed it reluctantly while remarking (he is, as you know, an oculist): "Gentlemen, the day will come when you will regret the passage of this bill."

I am in possession of reliable information and personal knowledge which proves that the governor has been a true prophet, and that the better class of opticians now bitterly regret the success (?) of those of their craft who engineered the bill.

The real animus of this bill is apparent: To give at least a *quasi* professional status to its originators in the eyes of a public as yet uneducated regarding what a *prescribing* optician does not know. The Board of "optometrists" (you will not find the name in any dictionary), began to grind; this time upon raw opaque material of unusually inferior quality, and so industriously, that the army of opticians is now crowded with raw, half-baked recruits legalized to prey upon the eyesight of the credulous and ignorant. *Hinc illa lacryma*, issuing from the eyes of the "legalized." Our brethren of the Empire State have thwarted successfully, several efforts of the opticians there to achieve identically pernicious legislation through "The 'Optical' Society of the State of New York." In a recent open letter, Dr. Frank Van Fleet, Chairman of the Committee on Legislation of the Med. Society of New York, states that the Society opposed, during the legislative session of 1904, a petition originated by the above "Optical Society" for a law creating a state board of examiners in "optometry." He writes:

"At the time of the hearing on the optometry bill before the legislative committee of last year, the opticians presented a long list of names of physicians who had endorsed their efforts. . . . The undersigned communicated with every one named on the list, and learned that where reputable physicians had endorsed the measure it was through a misapprehension of the real purpose of the bill; and when its true character was pointed out to them, they not only withdrew their endorsements, but in many cases wrote vigorous letters in opposition to it. Many of the names were fictitious, the communications addressed to the addresses given being returned as not found. A large number were the names of irregular practitioners, such as osteopaths, spiritualists, etc. The arguments presented by the opticians are very misleading. Their claim, of course, is that they desire to protect the community from incompetent people, but the fact is (as every well-informed physician must know), [italics mine] they are all incompetent."—*New York and Phila. Med. Jour.*

I invite your especial attention to this closing sentence, for it is my personal experience that the prescribing optician gets his most powerful "boost" from the "well-informed" but alas! inconsistent physician who goes to the optician for his own glasses! This same "well-informed" doctor would scorn an oculist who went, when ill, straight to a druggist for advice with medicine thrown in on the side.

To do justice to the better class of opticians we may heed the saying: "Live and let live;" 'tis an old saw and a just one, so we should not lump the "optometrist" and like "ists" with the reputable and conscientious optician, who, when he finds he cannot bring his customer's vision to normal, generally tries to persuade him to consult an oculist.

But while there is a difference in these two specimens of amateur doctors, woe to those who have incipient tabes or albuminuria, etc., and who go first to either of these amateurs not knowing he has a serious disease of which the deficient vision is but a symptom.

Some glass given by the optometrist may improve vision and lull the victim until it is too late. I have seen this happen again and again, and so probably have you; only the optician did not refer the patient to any physician.

Doubtless there are indifferent, careless oculists in this broad land, as well as untold thousands of incompetent lens "fitters"; but the stand taken by the profession of the Empire State, and by myself, is higher and broader. It is the *general practitioner, the family doctor*, who has the high privilege of forming public opinion, since he has the opportunity to advise and instruct his patients that the oculist is, like himself, a physician, and to go to him rather than to the optician, just as he advises them to avoid patent and proprietary medicines and take what he prescribes through the dying art of prescription writing. But, if he sets a contrary example by having his own eyes "fitted" (and his pocket filched) by some traveling or stationary "optometrist" he has forfeited his right to complain of that other extra incubus—the prescribing druggist.

I. O. PENNER, M. D.

INTELLIGENT EXAMINATION PAPERS!

As illustrative of the meager preparation of some recent graduates from a local medical college, the following (infra) answers are reproduced without alteration, from the public records of the State Board of Medical Examiners. The questions to which these answers were given, were:

Pathology.

1. Describe the characteristic scrapings obtained in cancer of the uterus.
2. Give the pathological classifications of goitres.
3. What valve is most commonly involved in endocarditis? What are the structural types of endocarditis and the common micro-organisms which produce these lesions?
4. State the most important sequel of diphtheria, and describe to what extent it may occur.
5. Describe the microscopic appearance of a true diphtheritic membrane.
6. After the use of what common drugs may the urine cause the reduction of Fehling's solution?
7. Describe a test for free hydrochloric acid in the stomach contents.
8. What vessels are most commonly involved in cerebral hemorrhage; in cerebral embolus?
9. Describe intussusception, and give its common seat.
10. Describe the microscopic structural changes in the kidney of parenchymatous nephritis and in the condition which frequently accompanies chronic supuration.

The answers to the above questions from candidate "A" are as follows:

1. Structure of the tissues are in the form of broken down epithelial cells and connective tissue caused from the destructive growth of the cancer.
- 2.
3. The valve most commonly involved is the mitral valve, the structures are congested roughened red & covered with lymph & deposit of vegetations upon the valve.
4. The most important sequel is weakening of the heart & heart muscles, or may cause paralysis & death if the patient is allowed to exert itself in anyway.
- 5.
- 6.
- 7.
8. The middle cerebral artery is hemorrhage of the brain. It depends upon the size of the embolus. a small one is apt to involve some of the small vessels leading off of the circle of Willis, a large embolus if

it reaches the brain is apt to involve the Basilar artery or the communicating arteries.

9.
10.

Candidate "B" replied as follows to the same questions:

1. Blood—Mucous membrane and epithelial cells
The walls of the blood vessels are made up of inter cellular substance.
- 2.
3. All of the valves are affected more or less, principally aortic.
With and without effusion. As a rule it is sequel of paracarditis.
4. Paralysis—May occur in one limb or organ or all of them.
5. It is an exudation of fibrine and cells and when removed leaves a bleeding surface. Klubs Leffler bacilli.
6. Calomel.
7. Hanes.
8. The capillaries,—also effects the circle of Willis.
9. It is a condition of the bowels in which they are susceptible to a disease. Solitary and Pyus glands.
10. There is an exudation of cells and that cuts off the blood supply. It is characterized by all the symptoms of inflammation. Cistytus.

COUNTY SOCIETIES.

Alameda County.

The regular monthly meeting of the Association was held on Monday evening, February 20, 1905, too late for this report to be published in the March number of the JOURNAL.

The retiring President, Dr. Jeremiah Maher, thanked the Association for the courtesies extended to him during his incumbency and in a short and characteristically pertinent address retired in favor of the newly elected President, Dr. Edward N. Ewer, who assumed the chair with a few well chosen remarks. President Ewer paid a well-deserved compliment to the administration of Dr. Maher, and bespoke for himself the same hearty support of the membership in his efforts to bring the Association to a high grade of scientific work as had been accorded the retiring President.

The program arranged for the evening consisted of a symposium on infant feeding, as follows: "Breast Feeding," Dr. Dudley Smith; "Home Modification of Cow's Milk," Dr. Chas. A. Dukes; "Proprietary Foods," Dr. Hubert N. Rowell. Dr. Smith believed that the science of infant feeding ought to hold a much more prominent place in medical science than has generally been accorded to it by the profession, in view of the fact that proper feeding during the first year or two of life is of primary importance in securing physical and mental perfection in later years. He regretted that faulty nutrition in infants was not commonly detected by the physician until the condition of the infant was so palpably bad as to alarm the parents, and attributed this to the fact that the simple expedient of accurately weighing the child each week is not insisted upon sufficiently; and it is all too common for substitute feeding to be prescribed without thought as to the possibility of correcting the errors in the mother's milk.

The management of normal breast feeding was outlined, conditions under which it should be discontinued were named, practical clinical methods and apparatus for the analysis of breast milk explained, and methods of treatment for the correction of the various forms of faulty lactation were given.

Dr. Dukes, in his paper, said that if percentage feeding is thoroughly studied, and each detail carefully carried out, not only as regards the percentage of

proteids, fats and sugar, but the quality of milk and class of cattle from which it is secured and the food upon which they are nourished, and the care with which the milk is secured, it will rarely if ever be necessary to resort to any other method of modified feeding. We must avoid changing the percentages too often and also remember that it is as necessary in infants as in adults to remove all food for a period of from twelve to twenty-four hours to correct acute attacks of indigestion.

The apparatus necessary for the home modification of cow's milk was described, due regard being given to the fact that it is necessary to keep the cost moderate, and a practical working method, with formula, was given in detail. The doctor maintained that if due care were exercised by the physician in explaining the details to the mother or nurse, no difficulty would be found in carrying out the successful feeding by this method, even in ignorant families. He expressed the hope, however, that we may have at an early date a laboratory for the modification of milk under scientific methods where we may have our prescriptions filled with as much ease and accuracy as our drug prescriptions are now compounded by our chemists.

Dr. Rowell was unable to be present, so the subject of "Proprietary Foods" was not touched upon.

In the discussion following the papers much valuable information was brought out. Dr. Dudley Smith took occasion to exhibit a simple and efficient Pasteurizer of his own design to the Association.

Dr. M. Lewis Emerson read a paper written by J. Louis Lohse, of the class of 1906, Oakland College of Medicine and Surgery, entitled "Typhoid as Manifested by the Rabbit." Mr. Lohse recalled that the results of experiments on the lower animals with the bacillus of typhoid had as a rule been failures, and though certain pathogenic effects have been produced, still the disease could not be said to be typical typhoid fever. He detailed minutely the experiments carried out by himself in November, 1904, and closed with the following: "In conclusion it seems plausible to admit that typhoid fever in this case was actually produced in the rabbit; and in corroboration of the statement I will recall to mind the terraced temperature curve, the positive widal reaction, the demonstration of the bacilli in the urine, blood and liver substance, the hyperemic and infiltrated mesenteric glands, and lastly, the beginning necrosis in the Peyer's patch."

Kings County.

To the Officers and Members of the Kings County Medical Society: We, your Committee, appointed to draft a suitable memorial of respect to the memory of our late confrere, Dr. N. P. Duncan, respectfully submit the following:

"The mournful notes which betoken the departure of a spirit from its earthly tabernacle has again alarmed our outer door, and another has been taken to swell the numbers in that unknown land whither our fathers have gone before us."

Dr. Nathaniel P. Duncan after a life of loyal service in the practice of medicine has passed to rest. Dr. Duncan was born in Pittsburgh, Penn., in 1849, of Scotch descent. His father was a native of Louisiana; emigrated to Pittsburgh in 1820, there engaging in mercantile business. Dr. Duncan's mother was the daughter of Nathaniel Patterson, a surveyor and engineer who was prominently identified with the platting of the city of Pittsburgh.

Dr. Duncan received his education in the Beaver Academy of the Washington and Jefferson College, after which he began the study of medicine under the preceptorship of Dr. David Stanton of New Brighton, Penn., completing his medical education at the Bellevue Hospital Medical College, New York City, in 1871. He began the practice of his profession at Enon, Penn., where he remained until 1873, when he came to California. Owing to poor health he

spent two years in traveling over the State, practiced a year in Fresno, and finally located in Lemoore in 1876, where he was married to Miss May Cranmer, a native of Calaveras County, California.

In 1886, Dr. Duncan moved from Lemoore to Hanford, purchased property and established his home. During almost the 30 years of medical practice in this section he has become well known to every inhabitant. His practice was extensive and successful, and by his liberal and sympathetic disposition he made himself popular with all classes. He was strongly attached to Hanford and Kings County, and was always in the front rank with those who used their best efforts in promoting the material welfare of the community. He was one of the organizers of the Hanford National Bank, filling the position of President of that institution till his death. In the practice of medicine he was liberal and safely conservative, a consistent exponent of the higher ideals in medicine, and upon the organization of the Kings County Medical Society was elected its President, and filled the duties of that office until his demise. No night was too dark, no storm too severe for him to face when called even for a long trip to minister professionally to the sick, no matter what the prospect of remuneration to him might be, and he did so more in the temper of a sympathizing friend, than as a mere professional man.

The many demands—business as well as professional—proved too severe a strain upon him and his health gradually began to fail. In the hope of recruiting lost energy, he laid aside the cares of life, and last fall visited his old home in Pennsylvania, as well as other eastern points, but without deriving any material benefit. His health still continued to fail, until finally he yielded to the inevitable decree of Fate, February 14, 1905.

While thoroughly unpretentious he had ability to discharge with credit the duties of any position he was called upon to fill; of modest and unassuming bearing, he was in all the relations of life, loyal, intelligent and faithful; esteemed and trusted in business circles; zealous and devoted in his duties; genial and love inspiring in his friendships; how greatly, how sadly, we shall miss the welcome presence of his familiar face, and the hearty pressure of his hand.

A loving husband, a patriotic citizen, an honored member of the medical profession, has passed from our circle forever. Nothing is our own, we hold our pleasures just a little while and they are fled. One by one death robs us of our treasures, and leaves the living to mourn, while the worthy dead find eternal rest in the other and better world.

Peace to thy memory, O, well beloved Brother, the world was richer by thy life, and is poorer by thy death.

All of which is respectfully submitted.

L. E. FELTON,
R. W. MUSGRAVE,
J. A. MOORE,

Committee on Memorial.

We would recommend that a copy of this Memorial be forwarded to the widow and mother of our deceased brother, a copy to the CALIFORNIA STATE JOURNAL OF MEDICINE, and that a copy also be inscribed on the records of this Society.

THE COMMITTEE.

Hanford, Calif., March 8, 1905.

Orange County.

The Orange County Medical Association met in regular session March 7th. There was a good attendance and considerable interest manifested in the paper and reports of cases.

Dr. Dobson reported three cases of amblyopia in three men who were smokers but who also drank regularly of claret wine. The doctor thought the cases resembled in some features poisoning by wood

alcohol, and as all three obtained this wine at the same winery it might possibly be due to something put in the wine by the manufacturer.

Dr. Wehrly read the paper of the evening, subject, "Radiotherapy and Radiography." Dr. Wehrly is enthusiastic regarding the treatment of lupus, epithelioma and keloid with the X-rays.

H. S. GORDON, Secretary.

Riverside County.

The March meeting of the Riverside County Medical Society was held Monday evening at the residence of Dr. C. S. Dickson. Thirteen members were present. The President, Dr. Roblee, occupied the chair. The Secretary reported that he had forwarded to our assemblyman and senator the resolutions adopted at the last meeting protesting against the passage of Assembly Bills 267 and 528; also that he had sent telegrams of the same purport.

The committee appointed at the last meeting to pass upon the application of Dr. H. M. Robertson, reported favorably and he was therefore elected to membership in the Society.

Communications from the Secretary of the State Society were read, and the Secretary of the local Society was directed to send a telegram to the Governor urging him to sign the Tuberculosis Sanitarium Bill.

Dr. Van Zwalenburg, on behalf of the committee, reported progress in the arrangements for the entertainment of the State Society, in April.

Dr. King of the State Board of Medical Examiners stated that, in the future, prosecutions for violations of the state medical law would have to be conducted by County Societies. He, therefore, moved that a committee of three be appointed, by the President, to formulate some method of procedure in such cases.

C. L. McFarland read a paper on the "Physician as a Witness." It was exceedingly interesting and very instructive, and elicited a free discussion of the many important points brought out in the paper.

The hostess, Mrs. Dickson, then extended to the Society an invitation to partake of the delicious refreshments which she had provided.

Dr. Jno. C. King then presented a very entertaining and suggestive paper on the "Physician as a Business Man." The subject was treated in an exceedingly original and instructive manner, and was listened to with great pleasure.

After a vote of thanks to the hostess for our entertainment, the Society adjourned until April.

SAMUEL OUTWATER, Secretary.

San Bernardino County.

San Bernardino County Medical Society met in the Y. M. C. A. Hall, pursuant to adjournment. President Dr. Browning in the chair. Dr. J. M. Hurley, Secretary of the Society, being absent, Dr. Wm. A. Taltavall was elected Secretary pro tem.

The name of Dr. E. A. McDonald of Redlands, Calif., was proposed for membership and was referred to the Board of Censors.

Dr. Browning explained the status of the medical bills now pending in the California State Legislature. Upon motion of Dr. Evans of Highlands it was ordered that a message be sent on behalf of this Society to Hon. F. C. Prescott, Speaker of the House of Legislature and member from this district, urging him to use his influence against the Antivaccination Bill and in favor of the bill to establish State Sanatoria for the treatment of tuberculous poor.

In the absence of Dr. W. H. Craig of Uplands, who was programmed to read a paper at this meeting, the President, Dr. Browning, called for reports of cases from members present. Dr. Shreck referred to the reported occurrence of cerebro-spinal meningitis in Redlands and asked for information as to the real nature of these cases. Dr. Sanborn reported that he

had had secondary cases, mostly tubercular, such as are liable to occur at any time; but he had seen nothing of an epidemic nature. Dr. Tyler reported two recent cases of meningitis; one in the infant child of a tuberculous father, the other in a boy of fifteen years, ill with typhoid fever, who died at the end of the third week.

Dr. Tyler reported two cases of fracture of the skull that had been under his care recently; one case being that of a man who had fallen off his bicycle striking on the left side of his face and head which resulted in extensive injuries to the bones and of the soft parts with hemorrhage from the nose, loss of sensation on the opposite side, etc. Notwithstanding such injuries, the man made a good recovery. The other case was that of a man thrown out of a carriage and striking on his head. At first there were no definite symptoms of any serious nature, the man being able to walk and talk. At the end of the third day thereafter paralysis developed, first in the face, then in the arm, and then in the leg; followed by coma which was succeeded by death. At the autopsy there was no evidence of injury externally, but inside the skull large clots were found covering both hemispheres. The middle meningeal arteries were ruptured, there being an extensive fracture of the base. Dr. Tyler contrasted the apparent gravity of the first case and the good recovery of the patient, with the seemingly trivial injury at first appearance and serious developments and fatal results in the second case.

Dr. Ide reported three cases of fracture of the skull which he had seen in Milwaukee, Wis., in which spiculae of bone had penetrated the orbit, causing serious lesion. Two of these patients had been treated by tying the internal carotid, which treatment resulted in causing an aneurism; also led to paralysis by cutting off the supply of blood to that side of the brain. In the other case there was no operation and the patient's eye was lost. Dr. Tyler reported a case of retained secundines which came under his care, which he treated by curetting six weeks after the supposed abortion had taken place. He stated that in his opinion the safest course to pursue was to clear the uterine cavity at once in all cases of abortion by curetting. Dr. Sanborn related a case in which placental tissue had been retained seven months and which on examination by a microscopist had been pronounced colloid cancer; this patient recovered. Dr. Sanborn said that he had since seen an article in a medical journal in which the resemblance of certain placental cells to cancer cells were pointed out. Dr. Browning spoke of the danger of the curet and instanced a case in which its use had proved fatal.

A motion of Dr. Tyler, was seconded by Dr. Bennette, that when the Society adjourns it be to meet in the Y. M. C. A. Hall in Redlands, on Wednesday, the 12th of April, at two o'clock P. M.

Bills submitted by the Secretary being allowed, adjourned as per above motion.

J. M. HURLEY, Secretary.

Santa Cruz County.

The Santa Cruz County Medical Society held its last meeting at the St. George Hotel, Santa Cruz. Drs. Clark, Sundberg, Congdon, Green, Watters, Hodgpeith, Phillips and Pope were present. Dr. Phillips in the chair.

The resignation of Dr. Knight was accepted. The Secretary was ordered to express the regrets of the Society to Dr. Knight and to inform him that he had been made an honorary member.

The Secretary was also instructed to telegraph to the Santa Cruz County assemblyman, George C. Cleaveland, that the Society greatly desired the defeat of Assembly Bill 267.

Dr. A. C. Posey was given a transfer to the Santa Clara County Society. His new address is Louise Building, San Jose.

Dr. H. H. Clark read an able paper on "Fractures at the Elbow Joint." Dr. P. K. Watters read upon the subject "When to Operate." Interesting discussion followed.

SAXTON POPE, Secretary.

San Francisco County.

The regular meeting for the month of March was held in the parlors of the Y. M. C. A. on the 14th, the meeting being called to order by the President, Dr. Emmet Rixford. Dr. Herbert C. Moffitt read a paper on "Clinical Observations in Nerve Syphilis," which was discussed by Drs. Montgomery, Power, and others. Dr. Wm. Fitch Cheney read a paper on "Tubercular Meningitis with Report of Three Cases," which was generally discussed. The following physicians were elected to membership: Drs. W. B. Foulkes, Jacob Schwarz, E. K. Hopkins, Louis Gross, J. W. Stowell, George E. Davis, James E. McCue, Shingo Hashimoto, and F. M. Gedney. The Secretary of the State Society reported that as the membership of the County Society now exceeded 512 members, it was entitled to another delegate to the State Society, and on motion, Dr. M. W. Fredrick was elected such delegate.

San Joaquin County.

The regular monthly meeting was held February 24th at the residence of Dr. C. R. Harry, President R. B. Knight in the chair.

The following members were present: Drs. W. E. Gibbons, R. R. Hammond, S. W. R. Langdon, A. W. Hoisholt, E. A. Arthur, J. D. Young, W. J. Young, S. B. Davis, W. W. Fitzgerald, D. F. Ray, J. J. Tully, S. W. Hopkins, Lodi, Minerva Goodman, R. B. Knight, Margaret Smyth, C. R. Harry and Barton J. Powell.

Dr. C. R. Harry read a paper on "Obstetric Methods in Dublin and Dresden."

The discussion was opened by Drs. W. J. Young, S. W. R. Langdon and W. E. Gibbons.

After refreshments the Society adjourned to meet at the residence of Dr. S. W. R. Langdon in March.

BARTON J. POWELL, Secretary.

Sonoma County.

The Sonoma County Medical Society met in the office of the Secretary with a good attendance. Drs. Swisher, Browne, Seawell and Wheeler came from Healdsburg in Dr. Swisher's automobile. Dr. Ivancovich and Dr. Duncan from Petaluma and Dr. Gray Eldridge.

The amendment to by-laws was passed fixing our annual dues at \$5. A resolution of respect to our late brother, Dr. Ward, was passed and ordered placed upon the minutes, and the bereaved family furnished copy of the same.

We received applications for membership from Dr. R. G. Reynolds, Upper Lake; Dr. A. R. Graham, Petaluma.

The thanks of the Society was tendered our energetic Committee on Public Health and Legislation. Their prompt action in informing our representatives at Sacramento of our deep interest in the proposed changes in our State medical law, which to us is quite efficient and much more satisfactory than the proposed changes. Dr. R. M. Crump is Chairman of the committee and Dr. W. J. Kerr and Dr. Smith McMullen are members. It was reported that two physicians were doing lodge work. No action was taken.

Dr. S. Bogle, County Physician, read his paper on "Vaccination." The paper is an excellent one.

He gave a history of vaccination from its beginning by the great Jenner; cited the benefits to humanity that now the smallpox was not so dreaded as it was when it depopulated villages and towns in Europe, and even in our own country. He gave his technique in vaccination—a history of the scar, etc.; that it was not necessary to have bad sores, which are caused by soiled linen, etc.

Dr. R. M. Bonar followed with a detailed account of army vaccination.

We adjourned at 12 M. with one of our most successful meetings. The following is the program for our next meeting, to be held March 9th, at the Secretary's office, Santa Rosa:

Paper—"Hernia-Inguinal". Diagnosis and Treatment. M. M. Shearer, M. D., Santa Rosa.

Discussion on Paper. R. Urban, M. D., Petaluma; J. W. Seawell, M. D., Healdsburg; J. H. McLeod, M. D., Santa Rosa.

General discussion limited to five minutes.

Be on hand, doctorum. We all need your mite.

* * * * *

The Sonoma County Medical Society met in the Secretary's office, March 9th. Dr. George Ivancovich presided. Owing to the illness of Dr. Shearer the paper of the evening had to be omitted.

Dr. Jesse gave a description of a case of purpura hemorrhagica of 4 days' standing, which resulted fatally. He also described his treatment.

At the next meeting, April 13th, there will be a paper, "A Plea for Care of the Child-bearing Woman," by Dr. A. McG. Stuart. Discussion by Drs. A. Anderson, J. J. Keating and H. S. Delamere. Also a paper by Dr. R. A. Forrest, "Sprain Fractures at the External Malleolus." G. W. MALLORY, Secretary.

Ventura County.

At the last meeting of the Ventura County Medical Society, held December 19, 1904, at the residence of Dr. John Love, the following officers were elected to serve during 1905: Dr. William R. Livingston, President; Dr. Thos. E. Cunnane, Vice-President; Dr. Chas. Teubner, Secretary and Treasurer. The Board of Censors consists of the following: Drs. D. Dwire, J. Love, A. A. Maulhardt, G. N. Stockwell, D. W. Mott, G. A. Broughton, J. H. Lowry and E. A. Vogt.

Dr. Livingston read a paper on "Appendicitis," giving the subject a most complete and modern elucidation.

All the members joined in the subsequent discussion, in which it developed that all had had considerable practical experience with the disease, and were thus able to thoroughly appreciate the very able paper of Dr. Livingston.

CHARLES TEUBNER, Secretary.

MEDICAL SOCIETIES.

Redlands Medical Society.

The annual meeting of the Redlands Medical Society was held on January 18, 1905, when the following officers were elected for the ensuing year: President, Dr. C. A. Sanborn; Vice-President, Dr. C. E. Ide; Secretary and Treasurer, Dr. W. A. Taltavall. The reports of the Secretary and Treasurer for the year just closed showed the Society to be in a flourishing condition. Dr. J. L. Avey read an interesting paper on "Hysteria," which was discussed by Drs. Ide, Strong, Shreck, Tyler, Alden and Browning.

At the regular monthly meeting held on February 15th, Dr. C. E. Ide spoke on "Prognosis in Heart Lesions." In the discussion which ensued Dr. Sanborn spoke of the differences of opinion as to insurance risks in heart lesions. He instanced the case of a prominent citizen who had been rejected by a company on account of the presence of an aortic regurgitant murmur. This indeed was present, but after a while it disappeared and at two subsequent examinations no murmur could be heard. The gentleman was then sent to the chief examiner of the company and to other physicians, and while there was a difference of opinion as to the exact condition, the presence of regurgitation was excluded, and the risk was afterward accepted. In reply to a question, Dr. Sanborn said that the premium was not increased in this case.

WM. A. TALTAVAL, Secretary.

San Joaquin Valley Medical Society.

The meeting was called to order about 2 P. M. by the President, Dr. Lilley of Merced, and after his address proceeded with the regular order of business. There were present Drs. Loper, Manson, W. T. Maupin, Russell, Trowbridge, Sherman, Dunn and J. R. Walker and J. D. Davidson of Fresno, Bering of Tulare, Harry of Stockton, Surrhyne and Evans of Modesto, Hennemuth of Waterford, A. W. Morton of San Francisco, Lilley, O'Brien, Smith, Whitlock and Wolfson of Merced, and Byars of Madera.

Dr. castle of Merced was elected to membership.

The first paper, "The Surgical Treatment of Tuberculosis of the Omentum and Mesentery," was not presented as the writer, Dr. Dameron, was not present, but Dr. Evans was called upon to discuss the subject anyhow. There was quite a lively discussion on the subject.

Next Dr. Harry of Stockton presented a paper on "Obstetric Methods in Dublin and Dresden," which was very interesting and brought forth a lively discussion of the subject.

Dr. Purdon of Galt sent his paper, he being unable to attend, the subject being "The Language of the Neurons." With it were a number of photos of pulse tracings which he had prepared.

Dr. McClelland of Los Banos sent a splendid paper the subject of which was: "Old Fashioned Remedies," in which he urged the profession to be better students of the *Materia Medica*, and to formulate their own prescriptions rather than to use so many ready made and proprietary mixtures, said to contain this or that and to cure a number of different diseases. It was greatly enjoyed by all, and freely discussed.

Dr. Russell's paper, "The Adrenal System," was of a scientific nature and well written and showed the author's study of the subject.

Resolutions, as follows, on the death of Dr. N. P. Duncan of Hanford, a former member, were adopted:

Since our last meeting our membership has been depleted by the loss of our esteemed co-worker, Dr. N. P. Duncan of Hanford.

Resolved, That by the death of our brother the San Joaquin Valley Medical Society has lost a valued, and zealous member, one ever ready to lend his best endeavors for the interest of this Society and the profession at large.

He was ever faithful to the duties entrusted to him, and was always ready to aid his professional brother to the extent of his ability. The community in which he lived and worked has also lost a faithful friend, who freely gave his time and service for their relief, and was ever ready and willing to answer a call and administer to their wants. Be it further

Resolved, That a copy of these resolutions be spread on the minutes of this Society, published in the CALIFORNIA STATE MEDICAL JOURNAL, a copy sent to his family, and a copy published in one of the Hanford papers. Be it further

Resolved, That this Society extend its sympathy to the bereaved family.

R. E. BERING,
D. H. TROWBRIDGE,
W. T. MAUPIN,
Committee on Resolutions.

The Society elected the following officers for the next term: President, Dr. R. E. Bering, Tulare; 1st Vice-President, Dr. P. Manson, Fresno; 2nd Vice-President, Dr. A. M. Smith, Merced; 3rd Vice-President, Dr. C. W. Kellogg, Bakersfield; Secretary, Dr. J. R. Walker, Fresno; Assistant Secretary, Dr. D. H. Trowbridge, Fresno; Treasurer, Dr. T. M. Hayden, Fresno.

The Society then adjourned to the Harvey House where they enjoyed a splendid banquet given by the Merced County Medical Society.

The next meeting will be held at Fresno on the 2nd Tuesday in October.

J. R. WALKER, Secretary.

ALCOHOLICS.*

By CHARLES ANDERSON, M. D., Santa Barbara.

THE discussion of the use of alcohol in medicine is so complicated by the contention of the warring elements, vested interests on one side and the religio-politico-ethical opinions on the other, that it is almost a dangerous proceeding to attack the question; for one side or the other is almost sure to raise the cry of interest, or the charge that the party has been influenced by unworthy motives. Unfortunately, the same state of affairs seems to have arisen within the medical profession as exists without, if the discussions in some of the journals are to be taken as an index. The organization of medical temperance societies shows that at least one side has taken a decided stand on a subject, that, scientifically is still *sub judice*.

What we want in the consideration of this subject are facts, scientifically determined facts, not arguments. The latter, most unfortunately, are what we have most of, on both sides of the question; while demonstrated facts such as scientific medicine of today demands, are sadly wanting. The sifting of the facts for or against the use of alcoholics as therapeutic agents, is not by any means an easy matter. The scientifically demonstrated items of fact so far separated from the mass of arguments and careless observations by untrained observers on the one hand, and on the other the scientifically obtained truths gained by trained observers, who in many instances have had no clinical experience by which to try out their observations, are not sufficient to base any definite conclusions upon.

It is now over thirty years since Bartholow¹ began his study of alcoholics as therapeutic agents in a scientific way. When he announced that alcohol actually reduced animal heat, I well remember how the "old practitioners" said, with ill-concealed contempt, that anyone could prove that it was not true by simply taking a good sized dram of whiskey any cold day. Bartholow took the temperature of a number of animals and birds, and then gave them alcohol and again took their temperature at short intervals and demonstrated that there was a slight rise of temperature at first, but later there was a steady and decided fall in temperature; he demonstrated the same thing in man. The study of blood pressure was unsatisfactory, by reason of lack of a reliable instrument, none being obtainable at that time. Anstie² had made a number of experiments, and, while at that time they were considered as satisfactory and complete, now they are out of date and too crude for our times, although they are still referred to by some writers.

Headland³ is even more antiquated, though he, too, is still quoted, but there is nothing in either of these authorities that is of any value today to anyone looking for such facts as we want now.

Stille⁴, in summing up the subject of the action of alcohol, says: "Experiments and observations made to determine the mode of action of alcohol on the economy have too generally referred to excessive doses rather than to such as are employed in dietetics and medicine. Hence, a dispute has arisen, whether alcohol raises or depresses animal temperature, when it is of daily experience that moderate doses augment the heat and excessive doses diminish it." He gives no experimental tests or figures to substantiate his statements. He quotes Moleschott's saying that "Alcohol is the savings bank of tissues. He who eats little and drinks alcohol in moderation retains as much in his blood and tissues, as he who eats more and drinks no alcohol." The quotation shows that Stille was a believer in the use of alcohol in moderation.

Spitzka⁵, in discussing alcoholic insanity, does not by any means make it clear that the patient is insane because he is a drunkard, or a drunkard because

*Read before the Santa Barbara County Medical Society, January, 1905.

he is of unsound mind, although he leaves you to infer the former as the fact.

Since the days of Batholow's first studies, the controversy has waged high and low, both in Europe and this country. What have purported to be clinical observations and laboratory demonstrations, have been brought out by both sides, showing what the partisans wished to know, and immediately the other side charges what may or may not be known, viz., that the results as published show only part of what was demonstrated, and not all the facts. The controversy has been particularly torrid in England. The anti-alcoholics, being led by Richardson, the arguments have been many and strong, but the demonstrations seem to have been few. Of course, it is easy to understand that a temperance advocate, who wanted to prove beyond peradventure that alcohol is a poison, could easily use a spirit containing methylic alcohol, CH HO instead of amyllic alcohol CH, and thereby get results beside which the trusted "terrible example" would be the merest child's play.

To such an extent has this controversy been carried, that nothing short of an examination of the subject by a government commission or a detail of medical officers from one or all of the departments maintaining medical officers; such a commission or detail of medical officers to be hedged about by extraordinary precautions so as to prevent influence by either side, or even the appearance of a justification of a charge of bias either way.

This commission or detail should have authority to make a full and complete examination of all phases of the subject. Aside from the ordinary physiological examination of the matter which should be carried on in the ordinary way, I would suggest that a physiologico-clinical study of various diseases be made for the benefit of practical medicine, as well as the more scientific examination of the subjects. That is, it should be the object to study the effect of alcohol on the process and progress of disease, if it has any. A given number of animals, subject to a disease common to man, to be inoculated with that disease, half this number to be given daily, a stated amount of alcohol (per weight of animal), then after a given time, dependent on the incubatory period of the disease being studied, the animals to be killed in pairs, one of the animals that has been given alcohol and one of the control animals, at such intervals as may be required, and the comparative pathological results, both gross and microscopical, to be noted and recorded in each case throughout the series. This should be carried out *in extenso* with every scientifically demonstrated disease, the series to be carried out and repeated as may be necessary to give an undoubted result, whatever it may be.

To remove the commission as far as possible from the storm-center of controversy, it might be well to have it sit in Manila and use one of the abandoned military hospitals.

In making a suggestion for physiologico-chemical study of diseases subjected to alcoholic dosage, I have no idea that it would be met with the approval of either side in the controversy, but I believe it would be a great benefit to the medical profession and the world in general.

REFERENCES.

1. Lectures before class in Medical College of Ohio, 1872-74. R. Batholow.
2. Stimulants and Narcotics, Francis E. Anstie, Philadelphia, 1865.
3. Action of Medicine, Frederick William Headland, Philadelphia, 1865.
4. National Dispensary, Alfred Stille, Philadelphia.
5. Manual of Insanity, E. C. Spitzka, New York, 1895.
6. Richard C. Cabot, Alcohol Studies, Boston, 1906.

A poor woman from the country once brought me three chickens nicely dressed, in payment for services, and it was learned later that she had stolen the chickens. Ergo: Patients are willing to steal in order to pay doctor's bills.—*Am. Medicine.*

PUBLICATIONS.

First Annual Report of the Henry Phipps Institute. Philadelphia.

The Henry Phipps Institute of Philadelphia founded in 1903 for the study, treatment and prevention of tuberculosis, has issued its First Annual Report, a volume containing 265 pages. The work of the first year is described in detail and bears evidence of the energy of Dr. Flick and his assistants, for clinical work was begun the day after the Institute was founded. A four-story building was secured and while the upper stories were being fitted up for wards, the dispensary work was developing. During the first year 2039 patients were treated, 254 of them being hospital patients. The dispensary department is thus seen to be a very important one, and its work is similar to that done by like organizations in New York, Boston, and Scranton, Pa., where, in addition to the necessary medical treatment, the patients are taught and drilled in preventive measures. They are not only taught how to care for their sputum, but the necessary material with which to care for it is provided for them. At regular intervals they are visited in their homes by nurses and given practical instruction in hygienic living. Too much cannot be said in commendation of this dispensary plan, and it is not to the credit of medical men and humanitarians elsewhere, that it is not found in every large city. What an opportunity exists in San Francisco, where the death rate from tuberculosis reaches 32 per 10,000 of population, for the legitimate use of some of our misdirected, but well meaning philanthropy!

The medical staff consists of 16 men; and there are 10 nurses, the latter composed of girls who were cured of tuberculosis at the White Haven Sanatorium, and thus the Institute is preparing women to nurse tuberculous subjects while providing an occupation for cured consumptives.

A laboratory, pathological museum, and autopsy room have been equipped, and the Autopsy Report forms a very important part of the work now being reviewed.

No special line of treatment is instituted, reliance being placed on food, nursing and hygienic living.

Of the results, time has not sufficiently elapsed to speak with any degree of accuracy, and besides in a dispensary practice it is impossible to compile correct results. Of the hospital patients, however, more than 28% are reported improved, 43% unimproved, 24% terminated in death, and in 4% the results are not recorded. These figures must not be compared with those of tuberculosis sanatoria, however, for it must be remembered patients in all stages of the disease are admitted here, and the majority of them came from the poorest district of Philadelphia and constituted a class whose resistance would naturally be a poor asset in the struggle.

An international lecture course, instituted for the education of the public, and given by men of prominence, constitutes an important feature of the work of the Institute. Drs. E. L. Trudeau, Wm. Osler, G. Sims Woodhead, Herman M. Biggs, and Edoardo Maragliano have already contributed to this course, and their lectures, previously published elsewhere, form part of this Report.

If space permitted much could be said regarding the very complete neurological report by Dr. McCarthy, in charge of that department, the section on tuberculous neuritis, 6 cases of which were thoroughly studied, being of particular interest. The author is in doubt whether the neuritis is due to tuberculous toxins, or to those from mixed infections. The ulnar reflex which he found present in practically all cases of advanced disease, and many cases of early tuberculosis, may prove of value in the recognition of incipient cases; at any rate, it will have its place in the symptom-complex. A report on a case of fibroid phthisis, and a statistical study of tuberculosis in Philadelphia complete this very interesting Report.

The prosecution of this work is rendered possible through the munificence of Mr. Henry Phipps, who founded and maintains it. G. H. E.

Eye, Ear, Nose and Throat Nursing.—By A. EDW. DAVIS, Prof. of Eye Diseases in the New York Postgraduate Med. School and Hospital, and BEAMAN DOUGLAS, Prof. of Nose and Throat Diseases in the same Institution. Published by F. A. Davis Co., Philadelphia, 1905. Price \$1.25.

This little work has come to fill a much-needed want. No one can realize the importance of this subject so well as the specialist who, besides being compelled to treat his patients in general hospitals, has often to instruct the nurse, otherwise well trained, in this special branch of nursing. It is a very thorough work of its kind, replete with illustrations and practical suggestions. The chapters on the eye have been written by Dr. Davis and those on the ear, nose and throat by Dr. Douglas. The book contains sufficient of anatomy, physiology and pathology to enable the nurse to work intelligibly upon these organs. Antisepsis, asepsis and operating room methods have received particular attention, also the preparation of solutions and dressings. Much space has been devoted to the care of special cases such as specific conjunctivitis, diphtheria, cataract, mastoiditis, empyema of the sinuses, laryngeal tuberculosis, etc. The authors are men of note and vast clinical experience and anything coming from their hands cannot but be accepted with serious consideration. L. C. D.

The Medical Examination for Life Insurance and Its Associated Clinical Methods.—By CHARLES L. GREENE, M. D., St. Paul. Second edition, revised and enlarged, with 99 illustrations. Philadelphia, P. Blakiston's Sons & Co., 1905. Price \$4.00.

This well-known work hardly needs an extended review. The present edition contains some additional matter of interest and value and is to that degree better than the first edition. The book is known favorably to every physician who does much life insurance work, and, indeed, is to be found in the library of nearly all such. It is very well gotten out and the marginal captions add greatly to the convenience and ease of ready reference. It will undoubtedly receive a cordial welcome by the class of physicians to which it appeals.

Publications of the University of California. Department of Physiology. Volume 2, parts as follows:

The Action on the Intestine of Solutions Containing Two Salts.—By JOHN BRUCE MACCULLUM.

The Action of Purgatives in a Crustacean (Sida crystallina).—By JOHN BRUCE MACCULLUM.

On the Validity of Pflüger's Law for the Galvanotropic Reactions of Paramecium.—By FRANK W. BANCROFT.

On the Fertilization, Artificial Parthenogenesis, and Cytolysis of the Sea Urchin Egg.—By JACQUES LOEB.

On an Improved Method of Artificial Parthenogenesis.—By JACQUES LOEB.

Seventh Annual Report of the Managers of the New Jersey State Village for Epileptics; year ending Oct. 31, 1904.

The Foundations and the Aims of Modern Pediatrics. By THEODORE VON ESCHERICH, Vienna, Austria.

The History of Pediatrics and Its Relation to Other Sciences and Arts.—By A. JACOBI.

Transactions of the Rhode Island Medical Society, Vol. VII, Part 1.

Diagnosis of Cholecystitis and Cholelithiasis.—By PARKER SYMS.

The Mental States Associated with Chorea.—By A. W. HOISHOLT.

Report of the Trustees of the Newberry Library for the year 1904.

Prostatic Obstruction to Urination.—By PARKER SYMS.

Remarks on Appendicitis.—By PARKER SYMS.

REGISTER CHANGES.

Those members who desire to keep their Registers corrected up to date should check this list carefully. In the following will be found all the official changes (in California) received from the 15th to the 15th.

Abbott, G. K., from Burbank to Glendale Sanitarium, Glendale. Hrs. 10 A. M. to 12 M. **Ainsworth, F. K.,** from Wells Fargo Bldg. to Southern Pacific Co., Merchants' Exchange, San Francisco.

Beattie, Wm. G., from 2838 Folsom st., San Francisco, to Novato, Marin Co. Hrs. 2-4 and 6:30-7:30 P. M. **Breistein, Louis A.,** from 1610 Geary st., San Francisco, to Goldfields, Nevada. **Bucknall, Geo. J.,** from 372 Sutter st. to 374 Sutter st., San Francisco.

Cochran, Guy, from 510 Trust Bldg. to Pacific Electric Bldg., Los Angeles. **Cosgrave, Millicent M. A.,** from 813 Sutter st. to 803 Sutter st., San Francisco. **Crees, Robert,** from Byron Hot Springs, Contra Costa Co., to Santa Maria, Santa Barbara Co.

Doherty, S. McL., from Fortuna, Humboldt Co., to Napa, Napa Co.

Eastland, Orin, from 77 3rd st. to 1274 12th ave., San Francisco.

French, Chas. E., from 546 Sutter st. to 391 Sutter st., San Francisco. **Friedlander, David,** from 751 Sutter st. to Central Bldg., 391 Sutter st., San Francisco.

Garcelon, Harris, from add. unknown to 229 North Grand ave., Los Angeles. **Goodfellow, Geo. E.,** from 771 Sutter st. to 751 Sutter st., San Francisco. **Gladning, Chas. F.,** from West Berkeley, Alameda Co., to Represa, Sacramento Co.

Howard, Wm. Berry, from 132 Church st. to 323 City Hall, San Francisco. Hrs. 3-5 P. M. **Hund, Otto H.,** from 1716 Howard st. to 716 Howard st., San Francisco. **Hunter, Hugh A.,** from Fort Bidwell, Modoc Co., to Reston, Manitoba, Canada. **Hymen, Sol.,** from 1916 California st. to Mt. Sinai Hospital, 5th ave. and 100th st., New York City.

Jackson, Wm. J., from Nome, Alaska, to 44 3rd st., San Francisco. Hrs. 2-4 and 7:30 P. M.

Kavanagh, Jos. J., from add. unknown to Vallejo, Solano Co. **Ketcham, Leander Y.,** from San Diego to Ensenada, Mexico.

Malaby, Z. T., from Pasadena to Hellman Bldg., Los Angeles. Hrs. 11 A. M. to 1 P. M. **McCarthy, Ellen F.,** from San Mateo to Union Trust Bldg., Cinn., Ohio. **McCue, Jas. E.,** from Veteran's Home, Napa, to 21 Powell st., San Francisco. **McElroy, B. F.,** from 135 Mason st. to Parrott Bldg., San Francisco. Hrs. 2-4 P. M.

Newbold, R. L., from add. unknown to Colusa, Colusa Co.

Orella, F. R., from 406 Sutter st., to James Flood Bldg., San Francisco.

Phipps, Charles, from 827 Haight st. to 1216 Jones st., San Francisco. Hrs. 7-8 P. M. **Pinninger, S. E.,** from Floriston, Nevada Co., to Lovelock, Humboldt Co., Nevada. **Porter, R. L.,** from 813 Sutter st. to 803 Sutter st., San Francisco. Hrs. 3-5 P. M. **Posey, A. C.,** from Watsonville, Santa Cruz Co., to Louise Bldg., San Jose, Santa Clara Co. **Pratt, Geo. D.,** from Wilson Blk., Los Angeles, to 723½ State st., Santa Barbara. Hrs. 9 A. M. to 12 M. and 1-5 P. M.

Read, J. M., from 415 Van Ness ave. to 369 Sutter st., San Francisco. **Rogers, L. S.,** from Tehachapi, Kern Co., to San Pedro, Los Angeles Co. P. O. box 2166.

Smith, Thos. K., from 511 9th st. to 517 National ave., San Diego.

Thompson, C. V., from add. unknown to Eureka, Humboldt Co. **Thompson, L. L.,** from Colfax, Placer Co., to Gridley, Butte Co. **Trask, H. C.,** from 349 Geary st. to Cloverdale, Sonoma Co.

Wright, A. H., from 590 Sutter st. to 1334 McAllister st., San Francisco.

Yerxa, Chas. W., from Sisters' Hospital to 614 Pacific Electric Bldg., Los Angeles. Hrs. 12:30-5 P. M.

New Names.

Carleton, Chas. H., 43-44 Mercantile Place, Los Angeles. Med. Dept. Univ. City of New York, '86. (C) '96.

Dodsworth, R. M., Long Beach. Coll. of Physicians and Surgeons, San Francisco, '00. (C) '00.

Ffoulkes, Bruce, James Flood Bldg., San Francisco. Cooper Med. Coll., '94. (C) '94. Hrs. 11 A. M. to 1 P. M.

Hogue, Gustavus, Fort McDowell, S. F. North Western Med. Univ., Ill., '99. (C) '04. Hunt, D. Winslow, Glendale, Los Angeles Co. Michigan University, '71. (C) '87.

Kankel, O. W., Upland, San Bernardino. University of Minn., '00. (C) '04.

Peoples, Stuart Z., Petaluma, Sonoma Co. Med. Dept. Univ. of California, '04. (C) '04.

Schwarz, Jacob, Mt. Zion Hospital, San Francisco. Med. Dept. Univ. of Calif., '04. (C) '04.

Swift, E. L. H., Hellman Bldg., Los Angeles. Med. Coll. Physicians and Surgeons, New York, '84. (C) '04. Hrs. 10 A. M. and 12:30 P. M.

New Members.

Avey, John L., San Bernardino Co. Med. Soc.

Bauter, Lucian A., Shasta Co. Med. Soc.

Carter, P. B., Santa Barbara Co. Med. Soc. Cooper, Chas. N., Santa Clara Co. Med. Soc.

Javis, Geo. E., San Francisco Co. Med. Soc.

Edgecomb, Thomas J., Shasta Co. Med. Soc.

Ffoulkes, Bruce, San Francisco Co. Med. Soc. Foster, S. B., Humboldt Co. Med. Soc.

Gedney, F. M., San Francisco Co. Med. Soc. Gould, F. S., Santa Barbara Co. Med. Soc.

Gross, Louis, San Francisco Co. Med. Soc.

Hogue, Gustavus, San Francisco Co. Med. Soc.

Lund, Chas. W., Yuba and Sutter Co. Med. Soc.

Maryin, Geo. D., Santa Clara Co. Med. Soc. McCue, Jas. E., San Francisco Co. Med. Soc. Menefee, P. M., Humboldt Co. Med. Soc.

Ottmer, F. H., Humboldt Co. Med. Soc.

Peoples, Stuart Z., San Joaquin Co. Med. Soc. Pierce, Robert E., Santa Clara Co. Med. Soc.

Rosson, Charles T., Kings Co. Med. Soc.

Schwarz, Jacob, San Francisco Co. Med. Soc.

Smith, Albert St. J., Santa Clara Co. Med. Soc.

Stowell, John M., San Francisco Co. Med. Soc. Swift, E. L. H., Los Angeles Co. Med. Soc.

Thompson, C. V., Humboldt Co. Med. Soc.

Deaths.

Duncan, N. P., Hanford, Kings Co.

Miller, J. A., Oakland, Alameda Co.

Truitt, Samuel W., San Francisco.

Wright, Bushnell A., Los Angeles.

Fourth Session of the California Public Health Association, April 17th, New Glenwood Hotel, Riverside.

Officers, 1904-5: President, Dr. LeMoyne Wills; Vice-President, Dr. Thomas Ross; Secretary-Treasurer, Dr. N. K. Foster. Executive Committee: Dr. Edward von Adelung, Chairman; Dr. N. K. Foster, Dr. William Simpson, Dr. D. F. Ragan.

PROGRAM.

10:00 A. M.—"Report on Legislation." A digest of the important health bills passed by the recent legislature.

10:30—"Disinfection"—By Dr. Rupert Blue, Director of the Marine Hospital Laboratory at San Francisco.

11:30—Miscellaneous Questions by Members, with replies and discussion.

1:30 P. M.—"Typhoid Quarantine"—By Dr. Hutchinson of Oregon.

2:15 P. M.—"Flies as Carriers of Contagion"—By Dr. J. O. Cobb, Marine Hospital Officer of Los Angeles.

3:00—"State Control of Tuberculosis"—By Dr. C. C. Browning of Highland.

3:45—"Septic Tank Disposal of Sewage"—Dr. Mason.

4:30—Miscellaneous questions and answers, and general discussion on any desired subjects.

UNCINARIASIS, WITH REPORT OF SEVEN CASES.*

By HERBERT GUNN, M. D., San Francisco.

UNCINARIASIS or ankylostomiasis, known as hook-worm disease, Egyptian chlorosis, brickburners' anemia, miners' anemia, tunnel disease, etc., until recently believed to be endemic only in tropical countries, is now known to be widely distributed throughout Germany, France, northern Italy, southern United States, South America, etc. In some countries it is quite prevalent, as in Porto Rico, where more than 50% of the inhabitants are affected. (Ashford.) In the southern United States, Georgia, Florida, and Texas, it is quite common, as shown by Stiles, Smith and others.

The cause of the disease is a small round worm, 6 to 15 m. m. in length, inhabiting the small intestine, principally the jejunum. Two varieties are recognized in the human being, the European, or uncinaria duodenalis, and the American, or uncinaria Americana, the latter described by Stiles. The worm produces a great many eggs which do not develop to embryonic form while in the host, but do so shortly after leaving the intestinal tract, if deposited in a suitable medium, as water or moist earth. Thus it is seen that there can be no multiplication of the parasites in the intestine.

Infection occurs through the food, drink, etc., and as shown by Loos, directly through the skin, the embryos penetrating the deeper tissues through the hair follicles, thus gaining access to the veins, and finally reaching the intestinal tract. Bently has shown that a skin disease, called in the South "ground itch," is frequently followed by uncinariasis. After infection occurs, and the embryo reaches the intestinal tract, it develops to maturity in a few weeks. The worm attaches itself by its powerful buccal armature to the intestinal wall and sucks blood, occasionally shifting its position, leaving behind a small wound which continues to ooze for some time. Loeb and Smith have recently demonstrated a substance occurring in the anterior portion of the canine ankylostoma which retards blood coagulation.

Many believe that some toxic substance is concerned in the production of the manifold and severe symptoms, which are notably as follows:

1. Anemia, with or without emaciation. Almost any degree and almost any blood picture may be present, accompanied by the usual symptoms of anemia. The hemoglobin is usually most affected; the red cells may be but slightly reduced with a marked fall of the hemoglobin; leukocytosis is not usually present; a decided eosinophilia is the rule; from 5% to 50%.

2. Gastro-intestinal symptoms are usually present, are often the first symptoms noticed; there may be flatulence, epigastric pain, and tenderness; dull or colicky pains in the abdomen; disturbed appetite, nausea and vomiting; constipation or diarrhea. Many patients show no other symptoms than those referable to the gastro-intestinal tract.

The mental condition is important, according to many observers, especially mental apathy, stupid expression and, according to Stiles, laziness. The temperature is not usually elevated, but may be so in some cases. Ashford, Manson, Smith, Craig and others report cases with varying degrees of temperature. The spleen is not usually supposed to be enlarged. Rheumatic pains may occur in the joints. The worm may be present and produce no symptoms whatever. The disease tends to run a chronic course unless modified by treatment.

Diagnosis. The possibility of this disease should be borne in mind when considering any of the anemias, as pernicious, secondary and chlorosis, and it should be especially remembered in the gastro-

*Read before the San Francisco County Medical Society, January, 1905.

intestinal disturbances of unknown origin or indefinite symptoms and possibly in fevers of unknown origin. The presence of an eosinophilia would of course lead one to suspect the disease. Once suspected there is usually no difficulty in finding the eggs of the worm in the stools.

Postmortem there may be found: 1, effusions into the cavities; 2, fatty degeneration of heart, liver and kidneys; 3, anemia of all the organs; 4, extravasations of blood in intestinal walls.

Prognosis as to complete recovery is usually excellent, though great difficulty may at times be met in expelling all of the parasites. Usually the symptoms ameliorate and improvement occurs under treatment even if all the worms are not expelled, but persistent treatment will eventually be successful. Without treatment, profound anemia and death may result.

Treatment. Thymol is the most efficacious remedy and may be given in cachets or capsules 15 to 20 grains at a dose repeated at hourly or two-hourly intervals until two or three doses have been administered. The intestinal tract should be thoroughly emptied by salines before the thymol is given and again a few hours after the last dose. Alcohol, oil, etc., solvents of thymol, should be avoided as absorption and poisoning may result. Male fern also has its advocates. Treatment should be carried out once a week until ova are no longer present in the stools.

Of the following cases, four occurred in Dr. P. M. Thomas' and in my own service in Dr. Hirschfelder's wards of the City and County Hospital and three in my practice. For the sake of brevity, only such data as directly bear on the subject under consideration are noted in these records. As far as I know, eight cases of this disease have been previously observed in this state, exclusive of a number of cases reported by Dr. Craig in the U. S. Army Hospital.

Case 1. W. T., male, age 52, American, City and County Hospital, May 28, 1904. During 1901 resided in Philippine Islands for several months. Enjoyed good health while there. After returning to this country the bowels were constipated at times; otherwise health perfect. Present illness began night before entering hospital with severe colicky pain in epigastrium, flatulence, vomiting, constipation and great thirst.

Examination showed a man, well-developed and nourished; tongue moist and slightly coated; violent pulsation in the vessels of the neck. Abdomen tympanitic and tender, especially over epigastric and left hypochondriac regions. Spleen very much enlarged, extending slightly to right of median line and almost to umbilicus. Slight edema of ankles. Temperature 100° F. Urine showed a trace of albumin. Blood, in hemoglobin 62; red corpuscles 4,500,000; leukocytes 21,500; marked eosinophilia; stools, ova of uncinaria.

Temperature in this case was unusual and ranged between normal and 104° F. for a month and a half. During this time there were two intermissions, one of two and one of eight days. (See temperature chart No. 1.) The leukocytosis ranged between 14,000 and 22,000. The eosinophilia averaged about 7% and at one time disappeared entirely for several days. Widal reaction negative; agglutination test for Malta fever negative; blood was negative for malaria and spirillum of relapsing fever. It was not considered that the infection with the uncinaria was the cause of the symptoms in this case and treatment in that line had been omitted. During the second intermission of fever—about one month after entering Hospital—the spleen had become somewhat smaller, but the tenderness over it and the epigastrium remained the same.

Thymol was administered, gr. XXX, two doses and improvement was immediate; less tenderness in epigastrium and less flatulence. A week later thymol was again administered and almost immediately all symptoms disappeared, the spleen gradually retracted and on August 4th, when the patient left the Hospital it could be felt just within the costal border.

This case I reported before the Cooper College Science Club some months ago. During the discussion it was questioned whether the symptoms were produced by the uncinaria. In the absence of any other known cause and the fact that the symptoms ameliorated immediately under treatment with thymol, it is probable that the worm was responsible for at least some of the symptoms.

Case 2. C. P., girl, age 17, native of Italy. Disease began three years ago, while at school in Italy, with dizziness, occasional vomiting, diarrhea and pain in the stomach. Had gone barefooted and suffered from swelling and itching of feet. Was in a hospital in Genoa for seven

months, where some improvement was noted. Came to United States two years ago and has been an invalid ever since. Has been under treatment for "blood disease" and at times shown quite marked but temporary improvement.

At present, September 23, 1904, complains of great weakness, listlessness, dyspnea on slight exertion, cessation of menstruation, etc. Bowels regular. Well developed and nourished; marked palor of visible mucous membranes; skin slightly olive tint; sclerae bluish and slightly icteric. Systolic murmur at base of heart and in vessels of neck. Venous humm on right side of neck. Moderate pulsation vessels of neck. Spleen enlarged 3 fingers beyond costal margin and slightly tender. Slight tenderness all over abdomen.

Hemoglobin 31; red cells, 2,012,000; leukocytes 4,400; eosinophilia 20%; smear showed marked evidence of anemia. Stool showed numerous ova of uncinaria and tricocephalus dispar. Under treatment with thymol, symptoms rapidly disappeared and patient gained her former strength.

November 7th, five weeks after treatment begun, hemoglobin 55; red blood corpuscles 4,000,000; eosinophilia 4%. December 31st, hemoglobin 53; red blood corpuscles 4,400,000; leukocytes 6,000; eosinophilia 8%. Smear showed no evidence of anemia. The patient appeared to be in perfect health.

Total number worms recovered: Uncinaria 177 (European variety); tricocephalus dispar, 30. This case had apparently been considered as a chlorosis, and without the demonstration of the eosinophilia, it was quite a natural error.

Case 3. Porto Rican; spent several years in Hawaiian Islands; admitted to City and County Hospital October 28, 1904. Complains of stomach trouble, pain in abdomen and flatulence. States he has lost about 40 pounds weight in last three years. Occasional attacks of diarrhea. Patient well developed and nourished. Decidedly apathetic. Tenderness all over abdomen, especially marked over epigastrium; no distention. Eosinophilia 16%; hemoglobin 66.

Thymol was administered—two 20-gr. doses—which the patient took badly. A week later two 30-gr. doses of thymol were followed by quite marked collapse. As the ova remained in the stools, male fern was repeatedly given and with practically no results. The symptoms were relieved temporarily to again return. Thymol was again exhibited in hourly doses of ten grains each, preceded by several doses of calomel. After this last treatment no ova have been observed in stools. The patient is still in hospital suffering from pain and tenderness in many joints of the body, which developed about the time the intestine was rid of the parasites. Worms recovered 150. (American variety).

Case 4. Porto Rican; age 19. Entered City and County Hospital October 31, 1904. No symptoms referable to the uncinaria. Blood, reds normal; hemoglobin 70%; eosinophilia, 28%; worms recovered, 60.

Case 5. L. P., male, age 29, American. Came to me November 5, 1904. Left Philippine Islands April, 1901. While there had diarrhea for eight months; occasionally passed blood; no gastric disturbances. Had dhoobie itch between the toes. Had malaria. Since return to United States has had nephritis, occasional attacks of fever and has never felt well and strong.

Present illness. For several weeks has had chilly sensations at night, and profuse sweats. Has felt feverish and weak. Loss of appetite. Well developed and nourished. Tongue coated, white. Spleen barely palpable, and in epigastrium and over liver and spleen. Blood: eosinophilia 9%; no anemia. Urine: Specific gravity, 1023; acid; albumin 1/40 of 1% (Esbach); occasional granular and hyaline casts. Temperature. (See chart No. 2).

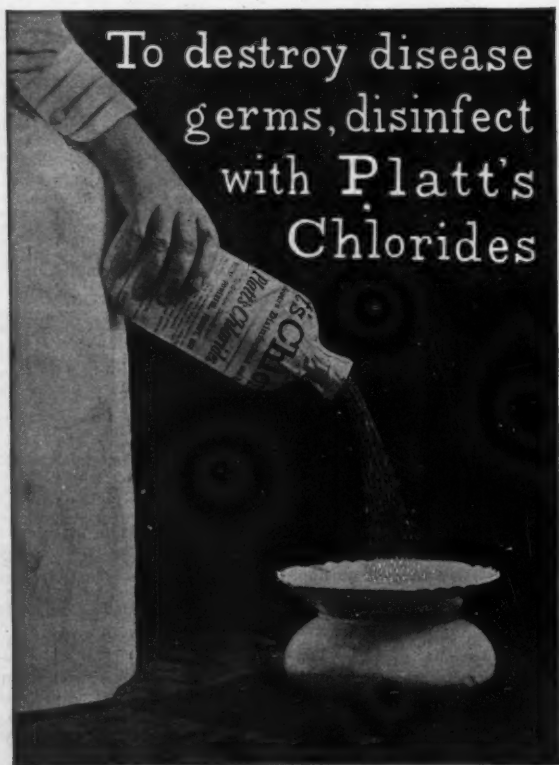
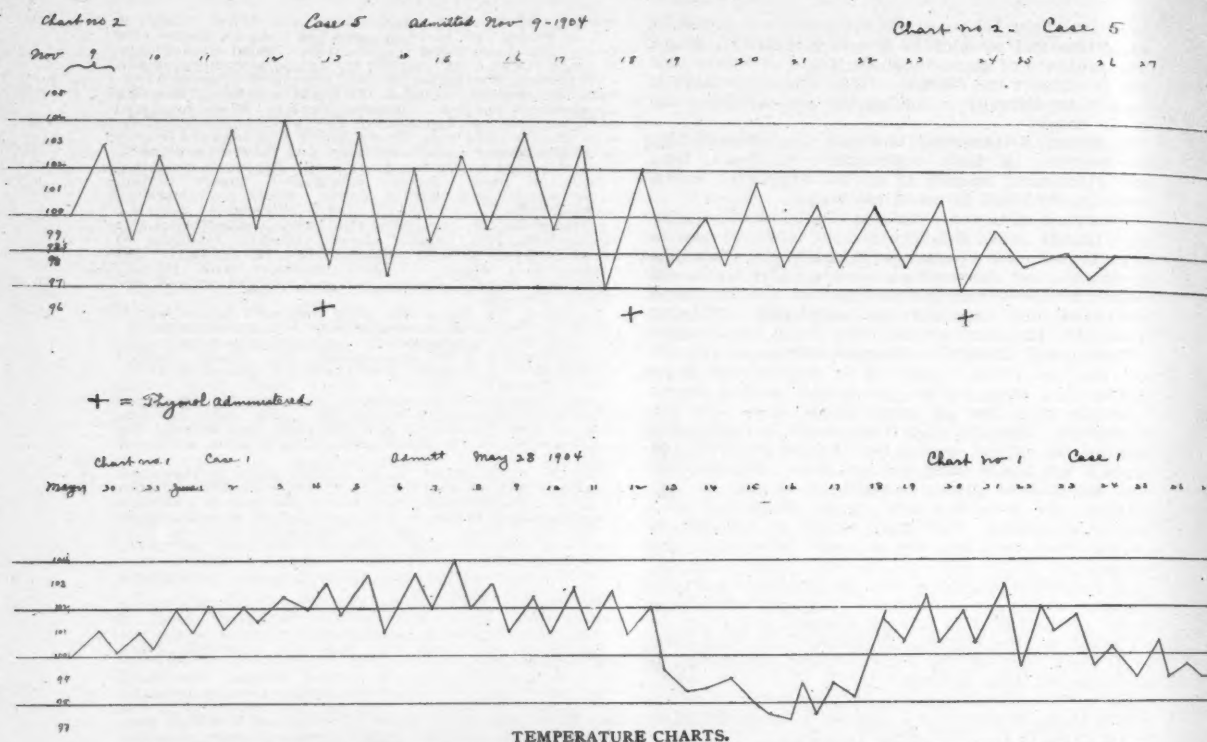
Thymol treatment. Disappearance of all symptoms; worms still present. Had to leave hospital for business reasons to resume treatment later. December 8, 1904; urine same as before treatment. January 5, 1905; patient appears perfectly well and is much stronger than he was before treatment was begun, but he is not as strong as he was before going to the Philippines.

Case 6. No symptoms. No anemia. Interesting on account of eosinophilia 3%. Stools; uncinaria and tricocephalus dispar.

Case 7. A physician. Came to me December 10, 1904. Disease developed in Philippine Islands. While there had dhoobie itch between the toes; occasional, very slight attacks of diarrhea and frequent attacks of flatulence, with some abdominal pains. For past three years, since return from the islands, has suffered from flatulence and diarrhea coming on at irregular intervals and lasting for three or four days. There has been no tenderness of abdomen except during attacks of diarrhea. The physical examination was negative. Blood, 12% eosinophilia. Stools, ova uncinaria and tricocephalus dispar fairly numerous. No treatment instituted as yet.

In conclusion, I should like to emphasize the importance of being on the lookout for this disease, especially here in California, where our population is of such a cosmopolitan character and where so many of us have at least visited tropical countries. It should not be forgotten also that in our country districts the disease may possibly become endemic.

(Temperature Charts, Page 130.)



IN an address on Pulmonary Tuberculosis read at the State Medical Association, Waco, Texas, Professor David R. Fly, A.M., M.D., stated: "The chief medium of contagion is the atmosphere impregnated with dry particles of sputum expectorated upon sidewalks, flooring, bed or clothes, etc. It is obvious, then, that those engaged in making beds, sweeping and dusting rooms occupied by tuberculous patients, are most exposed. This danger, however, can be materially lessened by sprinkling the rooms with a solution of Platt's Chlorides, one part to ten of water."

The cuspidor should be washed out daily with boiling water, and a mixture of one part Platt's Chlorides and four of water kept constantly in it to receive the sputum. The patient's clothing should be kept by itself, and thoroughly boiled when washed.

FORMULA—A combination of the saturated solutions of Chloride Salts proportioned as follows: Zn 40 per cent., Pb 20, per cent., Ca 15 per cent., Al 15 per cent., Mg 5 per cent. K 5 per cent.